Office de la Propriété Intellectuelle du Canada

Un organisme d'Industrie Canada

Canadian Intellectual Property Office

An agency of Industry Canada CA 2423800 A1 2003/03/25

(21) 2 423 800

(12) DEMANDE DE BREVET CANADIEN CANADIAN PATENT APPLICATION

(13) **A1**

(86) Date de dépôt PCT/PCT Filing Date: 2002/06/26

(87) Date publication PCT/PCT Publication Date: 2003/03/25

(85) Entrée phase nationale/National Entry: 2003/03/25

(86) N° demande PCT/PCT Application No.: JP 2002/006405

(87) N° publication PCT/PCT Publication No.: 2003/000254

(30) Priorités/Priorities: 2001/06/26 (2001-193786) JP; 2001/11/16 (2001-351537) JP

(51) CI.Int.⁷/Int.CI.⁷ A61K 31/4184, A61K 31/55, A61K 31/506, A61P 43/00, A61K 31/496, A61K 31/4523, A61K 31/4439, A61K 31/437, A61K 31/427, A61K 31/42, A61P 1/16, A61P 31/12, C07D 417/12, C07D 413/12, C07D 409/12, C07D 405/12, C07D 403/12, C07D 401/12, C07D 235/30, C07D 235/18, C07D 471/04, C07D 401/04

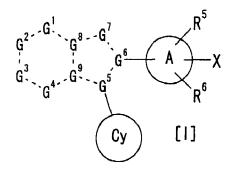
(71) Demandeur/Applicant:
JAPAN TOBACCO INC., JP

(72) Inventeurs/Inventors:
HASHIMOTO, HIROMASA, JP;
MIZUTANI, KENJI, JP;
YOSHIDA, ATSUHITO, JP

(74) Agent: FETHERSTONHAUGH & CO.

(54) Titre: COMPOSES CYCLIQUES CONDENSES ET UTILISATIONS MEDICALES DE CEUX-CI

(54) Title: FUSED CYCLIC COMPOUNDS AND MEDICINAL USE THEREOF



(57) Abrégé/Abstract:

Fused cyclic compounds represented by the following general formula [I] or pharmaceutically acceptable salts thereof and remedies for hepatitis C containing these compounds: [I] wherein each symbol is as defined in the description. Because of having an effect against hepatitis C virus (HVC) based on an HCV polymerase inhibitory effect, these compounds are useful as remedies or preventives for hepatitis C.





ABSTRACT OF THE DISCLOSURE

The present invention provides a fused ring compound of the following formula [I]

$$G^{2} - G^{1} - G^{8} - G^{7} - G^{8} - G^{7} - G^{8} - G^{8$$

5 wherein each symbol is as defined in the specification, a pharmaceutically acceptable salt thereof, and a therapeutic agent for hepatitis C, which contains this compound. The compound of the present invention shows an anti-hapatitis C virus (HCV) action based on the HCV polymerase inhibitory activity, and is useful as a therapeutic agent or prophylactic agent for hepatitis C.

DEMANDE OU BREVET VOLUMINEUX

LA PRÉSENTE PARTIE DE CETTE DEMANDE OU CE BREVET COMPREND PLUS D'UN TOME.

CECI EST LE TOME 1 DE 2 TENANT LES PAGES 1 À 429

NOTE: Pour les tomes additionels, veuillez contacter le Bureau canadien des brevets

JUMBO APPLICATIONS/PATENTS

THIS SECTION OF THE APPLICATION/PATENT CONTAINS MORE THAN ONE VOLUME

THIS IS VOLUME 1 OF 2 CONTAINING PAGES 1 TO 429

NOTE: For additional volumes, please contact the Canadian Patent Office

NOM DU FICHIER / FILE NAME:

NOTE POUR LE TOME / VOLUME NOTE:

SPECIFICATION

FUSED CYCLIC COMPOUNDS AND MEDICINAL USE THEREOF

Technical Field

The present invention relates to a novel fused ring

5 compound and a pharmaceutically acceptable salt thereof useful as
a therapeutic agent for hepatitis C, and to an intermediate
compound for the synthesis thereof. The present invention also
relates to a novel use of a certain fused ring compound or a
pharmaceutically acceptable salt thereof as a therapeutic agent

10 for hepatitis C. More particularly, the present invention relates
to a therapeutic agent for hepatitis C, which contains a novel
fused ring compound or a pharmaceutically acceptable salt thereof,
which is effective for the prophylaxis or treatment of hepatitis
C and which shows anti-hepatitis C virus (HCV) activity,

15 particularly anti-HCV activity based on an RNA-dependent RNA
polymerase inhibitory activity.

Background Art

In 1989, a main causative virus of non-A non-B posttransfusion hepatitis was found and named hepatitis C virus (HCV). Since then, several types of hepatitis viruses have been found besides type A, type B and type C, wherein hepatitis caused by HCV is called hepatitis C.

The patients infected with HCV are considered to involve several percent of the world population, and the infection with HCV characteristically becomes chronic.

HCV is an envelope RNA virus, wherein the genome is a single strand plus-strand RNA, and belongs to the genus Hepacivirus of Flavivirus (from The International Committee on Taxonomy of Viruses, International Union of Microbiological Societies). Of the same hepatitis viruses, for example, hepatitis B virus (HBV), which is a DNA virus, is eliminated by the immune system and the infection with this virus ends in an acute infection except for neonates and infants having yet immature immunological competence. In contrast, HCV somehow avoids the immune system of the host due to an unknown mechanism. Once infected with this virus, even an adult having a mature immune system frequently develops persistent infection.

When chronic hepatitis is associated with the persistent infection with HCV, it advances to cirrhosis or hepatic cancer in a high rate. Enucleation of tumor by operation does not help much, because the patient often develops recurrent hepatic cancer due 5 to the sequela inflammation in non-cancerous parts. In addition, there is a report on the involvement of HCV infection in dermatosis such as chronic urticaria, lichen planus, cryoglobulinemic purpura and the like (The Japanese Journal of Dermatology, 111(7), 1075-81, 2001).

Thus, an effective therapeutic method of hepatitis C is desired. Apart from the symptomatic therapy to suppress inflammation with an anti-inflammatory agent, the development of a therapeutic agent that reduces HCV to a low level free from inflammation and that eradicates HCV has been strongly demanded.

10

15

At present, a treatment with interferon is the only effective method known for the eradication of HCV. However, interferon can eradicate the virus only in about one-third of the patient population. For the rest of the patients, it has no effect or provides only a temporary effect. Therefore, an anti-20 HCV drug to be used in the place of or concurrently with interferon is awaited in great expectation.

In recent years, Ribavirin $(1-\beta-D-ribofuranosyl-1H-1,2,4$ triazole-3-carboxamide) has become commercially available as a therapeutic agent for hepatitis C, which is to be used 25 concurrently with interferon. It enhances the efficacy of interferon but only to a low efficacy rate, and a different novel therapeutic agent for hepatitis C is desired.

Also, an attempt has been made to potentiate the immunocompetence of the patient with an interferon agonist, an 30 interleukin-12 agonist and the like, thereby to eradicate the virus, but an effective pharmaceutical agent has not been found yet.

In addition, the inhibition of HCV growth, wherein HCVspecific protein is targeted, has been drawing attention these 35 days.

The gene of HCV encodes a protein such as serine protease, RNA helicase, RNA-dependent RNA polymerase and the like. These

proteins function as a specific protein essential for the growth of HCV.

One of the specific proteins, RNA-dependent RNA polymerase (hereinafter to be also briefly referred to as an HCV polymerase), is an enzyme essential for the growth of the virus. The gene replication of HCV having a plus-strand RNA gene is considered to involve synthesis of a complementary minus-strand RNA by the use of the plus-strand RNA as a template, and, using the obtained minus-strand RNA as a template, amplifying the plus-strand RNA.

The portion called NS5B of a protein precursor, that HCV codes for, has been found to show an RNA-dependent RNA polymerase activity (EMBO J., 15, 12-22, 1996), and is considered to play a central role in the HCV gene replication.

Therefore, an HCV polymerase inhibitor can be a target in
the development of an anti-HCV drug, and the development thereof
is eagerly awaited. However, an effective HCV polymerase
inhibitor has not been developed yet, like in other attempts to
develop an anti-HCV drug based on other action mechanisms. As the
situation stands, no pharmaceutical agent can treat hepatitis C
satisfactorily.

The following discloses known compounds relatively similar to the compound of the present invention.

The therapeutic agents for hepatitis C, which have a benzimidazole skeleton, are known from JP-A-2001-247550 (WOO1/47883, EP1162196A1) and WOO2/04425.

These publications disclose the following β -ketoamide compounds J etc. and K etc., respectively, as anti-HIV agents having an integrase inhibitory activity:

compound K

Note that the earliest publication dates of these publications are July 5, 2001 (WO01/47883) and January 17, 2002 (WOO2/04425), and the priority date of the present application is 5 June 26, 2001, antedating these publication dates.

In addition, a known therapeutic agent for hepatitis C having a benzimidazole skeleton is also disclosed in WO97/36866, Japanese Patent Application under PCT laid-open under kohyo No. 2000-511899 (EP906097) and WO99/51619.

WO97/36866 discloses the following compound D and the like, and HCV helicase inhibitory activity of the compounds.

Japanese Patent Application under PCT laid-open under kohyo No. 2000-511899 (EP906097) discloses the following compound E and the like, and WO99/51619 discloses the following compound F 15 and the like, in both of which a possibility of these compounds being effective as an HCV inhibitor is mentioned.

However, these publications do not include the compound disclosed in the present specification, or a disclosure suggestive thereof.

10

compound E

compound F

A known anti-hepatitis virus agent having a benzimidazole skeleton is disclosed in Japanese Patent Application under PCT

laid-open under kohyo No. 2000-503017 (WO97/25316) and Japanese Patent Application under PCT laid-open under kohyo No. 10-505092 (W096/7646).

WO97/25316 discloses the following compound A and the like, 5 wherein the use thereof is for a treatment of viral infection. The target virus is a DNA virus such as hepatitis B virus and the like. However, this publication does not include the compound disclosed in the present specification or a description regarding or suggestive of HCV.

Japanese Patent Application under PCT laid-open under kohyo No. 10-505092 discloses the following compound B and the like, wherein the use thereof is for a treatment of viral infection. The target virus is a DNA virus such as herpesvirus and hepatitis B virus. However, this publication does not include 15 the compound disclosed in the present specification or a description regarding or suggestive of HCV.

10

compound B compound A

The benzimidazole derivatives having an antiviral activity have been disclosed in JP-A-3-31264, US3644382 and US3778504. In 20 addition, W098/37072 discloses, as a production inhibitor of tumor necrosis factor (TNF) and cyclic AMP, a benzimidazole derivative for the use as an anti-human immunodeficiency virus (HIV) agent and an anti-inflammation agent. WO98/05327 discloses, as a reverse transcriptase inhibitor, a benzimidazole derivative 25 for the use as an anti-HIV agent. J. Med. Chem. (13(4), 697-704, 1970) discloses, as a neuraminidase inhibitor, a benzimidazole derivative for the use as an anti-influenza virus agent.

However, none of these publications includes the compound of the present invention or a description regarding or suggestive 30 of an anti-HCV effect.

Known benzimidazole derivatives having a pharmaceutical use other than as an antiviral agent are disclosed in JP-A-8-501318 (US5814651) and JP-A-8-134073 (US5563143). These

publications disclose the following compound C and the like as a catechol diether compound, and the use thereof as an anti-inflammation agent. However, neither of the publications includes the compound of the present invention, and as the action mechanism, the former discloses phosphodiesterase IV and the latter discloses TNF. These publications do not include a description regarding or suggestive of an anti-HCV effect.

Japanese Patent Application under PCT laid-open under kohyo No. 2000-159749 (EP882718) discloses the following compound 10 G and the like, and the use thereof for the treatment of bronchitis, glomerulonephritis and the like. However, this publication does not include the compound of the present invention, but discloses only a phosphodiesterase IV inhibitory and hypoglycemic action. This publication does not include a description regarding or suggestive of an anti-HCV effect.

US6211177 discloses the following compound H and the like with their use as antitumor agents. However, this publication does not encompass the compound of the present invention, and does not disclose or suggest an anti-HCV effect.

20

W098/50029, W098/50030 and W098/50031 disclose benzimidazole derivatives as an antitumor agent having a protein isoprenyl transferase action. While this publication discloses a wide scope of the claims, at least it does not include a compound analogous to the compound of the present invention or a description regarding or suggestive of an anti-HCV effect.

JP-A-8-109169 (EP694535) discloses the application of a tachykinin receptor antagonist to treat an inflammatory disease, and W096/35713 discloses the application thereof as a growth hormone release promoter to treat a growth hormone-related disease such as osteoporosis and the like. However, none of these publications includes a description regarding or suggestive of an anti-HCV effect.

WO2001/21634 discloses the following compound I in a chemical library. However, this publication does not encompass the compound of the present invention. While it discloses an antimicrobial activity of certain compounds, this publication does not teach or suggest an anti-HCV effect.

JP-A-53-14735 discloses a benzimidazole derivative as a brightener besides its pharmaceutical use, but this publication does not include the compound of the present invention.

Summary of the Invention

Based on the findings from the preceding studies, it has been elucidated that a pharmaceutical agent having an anti-HCV activity is effective for the prophylaxis and treatment of hepatitis C, and particularly an anti-HCV agent having an inhibitory activity on RNA-dependent RNA polymerase of HCV can be a prophylactic and therapeutic agent effective against hepatitis C and a prophylactic and therapeutic agent for the disease caused by hepatitis C.

Accordingly, the present invention provides a pharmaceutical agent having an anti-HCV activity, particularly a pharmaceutical agent having an RNA-dependent RNA polymerase inhibitory activity.

The present inventors have made an in-depth study of compounds having an anti-HCV activity, particularly RNA-dependent

RNA polymerase inhibitory activity, and completed the present invention.

Thus, the present invention provides the following (1) to (87).

5 (1) A therapeutic agent for hepatitis C, which comprises a fused ring compound of the following formula [I] or a pharmaceutically acceptable salt thereof as an active ingredient:

wherein

25

10 a broken line is a single bond or a double bond,

 G^1 is $C(-R^1)$ or a nitrogen atom,

 G^2 is $C(-R^2)$ or a nitrogen atom,

 G^3 is $C(-R^3)$ or a nitrogen atom,

 G^4 is $C(-R^4)$ or a nitrogen atom,

15 G^5 , G^6 , G^8 and G^9 are each independently a carbon atom or a nitrogen atom,

 G^7 is $C(-R^7)$, an oxygen atom, a sulfur atom, or a nitrogen atom optionally substituted by R^8 ,

wherein R^1 , R^2 , R^3 and R^4 are each independently,

- 20 (1) hydrogen atom,
 - (2) C_{1-6} alkanoyl,
 - (3) carboxyl,
 - (4) cyano,
 - (5) nitro,
 - (6) C₁₋₆ alkyl optionally substituted by 1 to 3 substituent(s) selected from the following group A, group A; halogen atom, hydroxyl group, carboxyl, amino, C₁₋₆ alkoxy, C₁₋₆ alkoxy C₁₋₆ alkoxy, C₁₋₆ alkoxycarbonyl and C₁₋₆ alkylamino,
- 30 (7) $-COOR^{a1}$ wherein R^{a1} is optionally substituted C_{1-6} alkyl (as defined above), C_{6-14} aryl C_{1-6} alkyl optionally

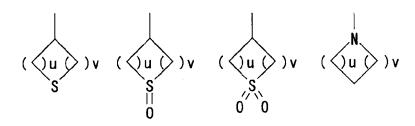
substituted by 1 to 5 substituent(s) selected from the following group B or glucuronic acid residue, group B; halogen atom, cyano, nitro, C1-6 alkyl, halogenated C_{1-6} alkyl, C_{1-6} alkanoyl, $-(CH_2)_r - COOR^{b1}$, $-(CH_2)_r - CONR^{b1}R^{b2}$, $-(CH_2)_r - NR^{b1}R^{b2}$, 5 $-(CH_2)_r - NR^{b1} - COR^{b2}_r$, $-(CH_2)_r - NHSO_2R^{b1}_r$, $-(CH_2)_r - OR^{b1}_r$, $-(CH_2)_r-SR^{b1}$, $-(CH_2)_r-SO_2R^{b1}$ and $-(CH_2)_r-SO_2NR^{b1}R^{b2}$ wherein R^{b1} and R^{b2} are each independently hydrogen atom or C_{1-6} alkyl and r is 0 or an integer of 1 to 6, 10 (8) $-CONR^{a2}R^{a3}$ wherein Ra2 and Ra3 are each independently hydrogen atom, C_{1-6} alkoxy or optionally substituted C_{1-6} alkyl (as defined above), (9) $-C (=NR^{a4}) NH_2$ 15 wherein R^{a4} is hydrogen atom or hydroxyl group, (10) -NHR^{a5} wherein R^{a5} is hydrogen atom, C_{1-6} alkanoyl or C_{1-6} alkylsulfonyl, $(11) - OR^{a6}$ 20 wherein Ra6 is hydrogen atom or optionally substituted C_{1-6} alkyl (as defined above), $(12) -SO_2R^{a7}$ wherein R^{a7} is hydroxyl group, amino, C_{1-6} alkyl or C_{1-6} alkylamino, 25 (13) $-P(=0) (OR^{a31})_2$ wherein R^{a31} is hydrogen atom, optionally substituted C_{1-6} alkyl (as defined above) or C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B 30 or (14) heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom, and R⁷ and R⁸ are each hydrogen atom or optionally substituted 35 C_{1-6} alkyl (as defined above), is ring Cy

(1) C_{3-8} cycloalkyl optionally substituted by 1 to 5

substituent(s) selected from the following group C, group C; hydroxyl group, halogen atom, C_{1-6} alkyl and C_{1-6} alkoxy,

(2) C_{3-8} cycloalkenyl optionally substituted by 1 to 5 substituent(s) selected from the above group C, or

(3)



wherein u and v are each independently an integer of 1 to 3,

10 ring A

15

20

Χ

5

is

- (1) C_{6-14} aryl,
- (2) C_{3-8} cycloalkyl,
- (3) C_{3-8} cycloalkenyl or
- (4) heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom,

 R^5 and R^6 are each independently

- (1) hydrogen atom,
- (2) halogen atom,
- (3) optionally substituted C_{1-6} alkyl (as defined above) or
- (4) $-OR^{a8}$ wherein R^{a8} is hydrogen atom, C_{1-6} alkyl or C_{6-14} aryl C_{1-6} alkyl, and

is

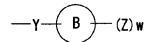
- 25 (1) hydrogen atom,
 - (2) halogen atom,
 - (3) cyano,
 - (4) nitro,
 - (5) amino, C_{1-6} alkanoylamino,

30 (6) C_{1-6} alkylsulfonyl,

- (7) optionally substituted C_{1-6} alkyl (as defined above),
- (8) C_{2-6} alkenyl optionally substituted by 1 to 3 substituent(s) selected from the above group A,

- (9) $-COOR^{a9}$ wherein R^{a9} is hydrogen atom or C_{1-6} alkyl,
- (10) $-\text{CONH-}(\text{CH}_2)_1 \text{R}^{\text{al}0}$ wherein $\text{R}^{\text{al}0}$ is optionally substituted C_{1-6} alkyl (as defined above), C_{1-6} alkoxycarbonyl or C_{1-6} alkanoylamino and l is 0 or an integer of 1 to 6,
- (11) $-OR^{all}$ wherein R^{all} is hydrogen atom or optionally substituted C_{1-6} alkyl (as defined above)

or (12)



wherein

ring B is

(1') C_{6-14} aryl,

- (2') C_{3-8} cycloalkyl or
- (3') heterocyclic group (as defined above),
 each Z is independently
 - (1') a group selected from the following group D,
 - (2') C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the following group D,
 - (3') C_{3-8} cycloalkyl optionally substituted by 1 to 5 substituent(s) selected from the following group D,
 - (4') C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the following group D,
 - (5') heterocyclic group optionally substituted by 1 to 5 substituent(s) selected from the following group D,

wherein the heterocyclic group has 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom, or

(6') heterocycle C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the following group D,

wherein the heterocycle C_{1-6} alkyl is C_{1-6} alkyl substituted by heterocyclic group optionally

5

20

25

30

substituted by 1 to 5 substituent(s) selected from the group D, as defined above,

group D:

- (a) hydrogen atom,
- (b) halogen atom,
- (c) cyano,
- (d) nitro,
- (e) optionally substituted $C_{1\text{-}6}$ alkyl (as defined above),
- (f) $-(CH_2)_t-COR^{a18}$,

(hereinafter each t means independently 0 or an integer of 1 to 6),

wherein Rall is

- (1") optionally substituted C_{1-6} alkyl (as defined above),
- (2") C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B or
- (3") heterocyclic group optionally substituted
 by 1 to 5 substituent(s) selected from
 the above group B
 wherein the heterocyclic group has 1 to
 4 heteroatom(s) selected from an oxygen
 atom, a nitrogen atom and a sulfur atom,
- (g) $-(CH_2)_t-COOR^{a19}$ wherein R^{a19} is hydrogen atom, optionally substituted C_{1-6} alkyl (as defined above) or C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B,
- (h) $-(CH_2)_t-CONR^{a27}R^{a28}$ wherein R^{a27} and R^{a28} are each independently, (1") hydrogen atom,
 - (2") optionally substituted C_{1-6} alkyl (as defined above),
 - (3") C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

10

5

15

20

25

30

	(4") C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B,
5	<pre>(5") heterocyclic group optionally substituted by 1 to 5 substituent(s) selected from the above group B,</pre>
	(6") heterocycle C ₁₋₆ alkyl optionally substituted by 1 to 5 substituent(s) selected
10	from the above group B, wherein the heterocycle C_{1-6} alkyl is C_{1-6} alkyl substituted by heterocyclic group optionally
	substituted by 1 to 5 substituent(s) selected from the above group B, as defined above, $(7'')$ C_{3-8} cycloalkyl optionally substituted by 1
15	to 5 substituent(s) selected from the above group B,
	(8") C_{3-8} cycloalkyl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected
	from the above group B,
20	(9") hydroxyl group or
	(10") C_{1-6} alkoxy,
	(i) $-(CH_2)_t-C(=NR^{a33})NH_2$
	wherein R^{a33} is hydrogen atom, C_{1-6} alkyl,
•	hydroxyl group or C_{1-6} alkoxy,
25	$(j) - (CH_2)_t - OR^{a20}$
	wherein R ^{a20} is
	(1") hydrogen atom, (2") optionally substituted C_{1-6} alkyl (as
	defined above),
30	(3") optionally substituted C_{2-6} alkenyl (as defined above),
	(4") C ₂₋₆ alkynyl optionally substituted by 1 to 3 substituent(s) selected from the above group A,
35	(5") C ₆₋₁₄ aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B,
	(6") C_{6-14} aryl C_{1-6} alkyl optionally

	substituted by 1 to 5 substituent(s)
	selected from the above group B,
	(7") heterocyclic group optionally substituted
	by 1 to 5 substituent(s) selected from
5	the above group B,
	(8") heterocycle C_{1-6} alkyl optionally
	substituted by 1 to 5 substituent(s)
	selected from the above group B,
	(9") C_{3-8} cycloalkyl optionally substituted by
10	1 to 5 substituent(s) selected from the
	above group B, or
	(10") C_{3-8} cycloalkyl C_{1-6} alkyl optionally
	substituted by 1 to 5 substituent(s)
	selected from the above group B,
15	$(k) - (CH_2)_t - O - (CH_2)_p - COR^{a21}$
	wherein R^{a21} is amino, C_{1-6} alkylamino or
	heterocyclic group optionally substituted by
	1 to 5 substituent(s) selected from the above
	group B, and p is 0 or an integer of 1 to 6,
20	(1) $-(CH_2)_{\tau}-NR^{a22}R^{a23}$
	wherein R ^{a22} and R ^{a23} are each independently
	(1") hydrogen atom,
	(2") optionally substituted C_{1-6} alkyl (as
	defined above),
25	(3") C_{6-14} aryl optionally substituted by 1 to
	5 substituent(s) selected from the above
	group B,
	(4") C_{6-14} aryl C_{1-6} alkyl optionally
	substituted by 1 to 5 substituent(s)
30	selected from the above group B,
	(5") heterocycle C_{1-6} alkyl optionally
	substituted by 1 to 5 substituent(s)
	selected from the above group B or
	(6") heterocyclic group optionally
35	substituted by 1 to 5 substituent(s)
	selected from the above group B,
	(m) $-(CH_2)_t-NR^{a29}CO-R^{a24}$
	wherein R^{a29} is hydrogen atom, C_{1-6} alkyl or C_{1-6}

alkanovl, and R^{a24} is (1") amino, (2") C_{1-6} alkylamino, (3") optionally substituted C_{1-6} alkyl (as defined above), 5 (4") C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B, (5") heterocyclic group optionally substituted by 1 to 5 substituent(s) selected from 10 the above group B or (6") heterocycle C1-6 alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B, (n) $-(CH_2)_+-NR^{a29}SO_2-R^{a25}$ 15 wherein R^{a29} is as defined above, and R^{a25} is hydrogen atom, optionally substituted C_{1-6} alkyl (as defined above), C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group 20 B or heterocyclic group optionally substituted by 1 to 5 substituent(s) selected from the above group B, (o) $-(CH_2)_t - S(O)_a - R^{a25}$ wherein R^{a25} is as defined above, and q is 0, 25 1 or 2, (p) $-(CH_2)_t-SO_2-NHR^{a26}$ wherein R^{a26} is hydrogen atom, optionally substituted C_{1-6} alkyl (as defined above), C_{6-14} aryl optionally substituted by 1 to 5 30 substituent(s) selected from the above group B or heterocyclic group optionally substituted by 1 to 5 substituent(s) selected from the above group B, and 35

and a sulfur atom, and

(g) heterocyclic group having 1 to 4 heteroatom(s)

selected from an oxygen atom, a nitrogen atom

w is an integer of 1 to 3, and Y is (1') a single bond, (2') C_{1-6} alkylene, (3') C_{2-6} alkenylene, 5 $(4') - (CH_2)_m - O - (CH_2)_n -$ (hereinafter m and n are each independently 0 or an integer of 1 to 6), (5') -CO-, (6') $-CO_2-(CH_2)_n-$ 10 (7') -CONH- $(CH_2)_n$ -NH-, (8') -NHCO₂-, (9') -NHCONH-, (10') -O- $(CH_2)_n$ -CO-, (11') -O- $(CH_2)_n$ -O-, 15 $(12') -SO_2-,$ $(13') - (CH₂)_m - NR^{a12} - (CH₂)_n$ wherein Rall is (1") hydrogen atom, (2") optionally substituted C_{1-6} alkyl (as .20 defined above), (3") C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B, (4") C_{6-14} aryl optionally substituted by 1 to 25 5 substituent(s) selected from the above group B, (5") -COR^{b5} wherein R^{b5} is hydrogen atom, optionally substituted C_{1-6} alkyl (as defined above), 30 C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B or C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B, 35 (6") -COOR^{b5} (R^{b5} is as defined above) or (7") -SO₂R^{b5} (R^{b5} is as defined above),

(14') -NR^{al2}CO- (R^{al2} is as defined above),

$(15')$ -CONR ^{a13} - $(CH_2)_n$ -
wherein R ^{a13} is hydrogen atom, optionally
substituted C_{1-6} alkyl (as defined above) or
C_{6-14} aryl C_{1-6} alkyl optionally substituted by
1 to 5 substituent(s) selected from the above
group B,
a14

(16') -CONH-CHR^{a14}wherein R^{a14} is C₆₋₁₄ aryl optionally
substituted by 1 to 5 substituent(s) selected
from the above group B,

(17') $-O-(CH_2)_m-CR^{a15}R^{a16}-(CH_2)_n-$ wherein R^{a15} and R^{a16} are each independently (1") hydrogen atom,

(2") carboxyl,

(3") C_{1-6} alkyl,

(4") -OR^{b6}

wherein R^{b6} is C_{1-6} alkyl or C_{6-14} aryl C_{1-6} alkyl, or

(5") -NHR^{b7}

wherein R^{b7} is hydrogen atom, C_{1-6} alkyl, C_{1-6} alkanoyl or C_{6-14} aryl C_{1-6} alkyloxycarbonyl, or R^{a15} is optionally

(6")

$$-(CH_2)_{\frac{1}{n'}} B' - (Z') w'$$

wherein n', ring B', Z' and w' are the same as the above-mentioned n, ring B, Z and w, respectively, and may be the same as or different from the respective counterparts,

- (18') $-(CH_2)_n-NR^{a12}-CHR^{a15}-$ (R^{a12} and R^{a15} are each as defined above),
- (19') $-NR^{a17}SO_2$ wherein R^{a17} is hydrogen atom or C_{1-6} alkyl,
- (20') $-S(0)_e-(CH_2)_m-CR^{a15}R^{a16}-(CH_2)_n-$ (e is 0, 1 or 2, R^{a15} and R^{a16} are each as defined above),

(21') $-(CH_2)_m-CR^{a15}R^{a16}-(CH_2)_n-(R^{a15})$ and R^{a16} are each as defined above).

35

30

5

10

15

20

- (2) The therapeutic agent of (1) above, wherein 1 to 4 of the G^1 , G^2 , G^3 , G^4 , G^5 , G^6 , G^7 , G^8 and G^9 is (are) a nitrogen atom.
- (3) The therapeutic agent of (2) above, wherein G^2 is $C\left(-R^2\right)$ and G^6 is a carbon atom.
- 5 (4) The therapeutic agent of (2) or (3) above, wherein G^5 is a nitrogen atom.
 - (5) The therapeutic agent of (1) above, wherein, in formula [I], the moiety

10 is a fused ring selected from

(6) The therapeutic agent of (5) above, wherein, in formula [I], the moiety

$$G^{2} G^{\frac{1}{2}} G^{\frac{1}{2}$$

is a fused ring selected from $% \left(1\right) =\left(1\right) \left(1\right)$

(7) The therapeutic agent of (6) above, which comprises a fused ring compound of the following formula [I-1]

- 5 wherein each symbol is as defined in (1), or a pharmaceutically acceptable salt thereof as an active ingredient.
 - (8) The therapeutic agent of (6) above, which comprises a fused ring compound of the following formula [I-2]

$$\begin{array}{c|c}
R^2 & & \\
\hline
R^3 & & \\
\hline
R^4 & & \\
\hline
Cy & & \\
\end{array}$$

$$\begin{array}{c|c}
R^5 \\
\hline
R^6 & \\
\end{array}$$
[1-2]

10

wherein each symbol is as defined in (1), or a pharmaceutically acceptable salt thereof as an active ingredient.

(9) The therapeutic agent of (6) above, which comprises a fused ring compound of the following formula [I-3]

$$\begin{array}{c|c}
R^2 & & & \\
\hline
 R^3 & & & \\
\hline
 R^3 & & & \\
\hline
 Cy & & & \\
\hline
 R^5 & & \\
\hline
 R^6 & & \\
\hline
 Cy & & \\
\hline
 R^6 & & \\
\hline
 R^6 & & \\
\hline
 R^6 & & \\
\hline
 R^7 & & \\
\hline
 R^6 & & \\
\hline
 R^7 & & \\
\hline
 R^$$

wherein each symbol is as defined in (1), or a pharmaceutically acceptable salt thereof as an active ingredient.

(10) The therapeutic agent of (6) above, which comprises a fused 5 ring compound of the following formula [I-4]

$$\begin{array}{c|c}
R^2 & R^5 \\
R^3 & R^6
\end{array}$$

$$\begin{array}{c|c}
R^5 & \\
R^6 & \\
\end{array}$$

$$\begin{array}{c|c}
R^5 & \\
\end{array}$$

wherein each symbol is as defined in (1), or a pharmaceutically acceptable salt thereof as an active ingredient.

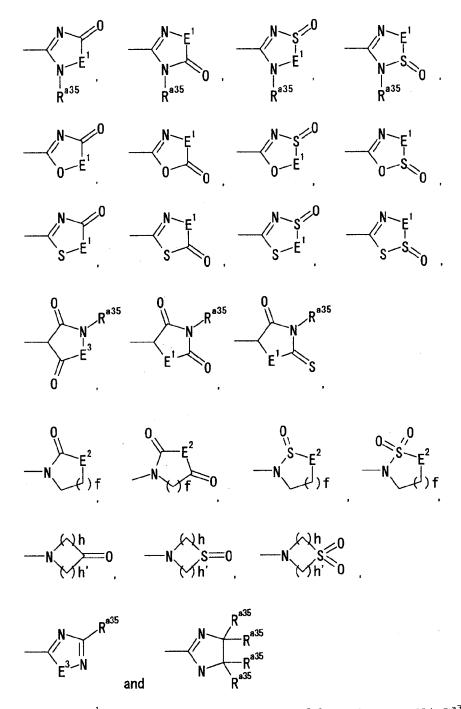
10 (11) The therapeutic agent of any of (1) to (10) above, wherein at least one of R^1 , R^2 , R^3 and R^4 is carboxyl, $-COOR^{a1}$, $-CONR^{a2}R^{a3}$, $-SO_2R^{a7}$ (wherein R^{a1} , R^{a2} , R^{a3} and R^{a7} are as defined in (1)),

- (12) The therapeutic agent of (11) above, wherein at least one of 15 R^1 , R^2 , R^3 and R^4 is carboxyl, $-COOR^{a1}$, $-CONR^{a2}R^{a3}$ or $-SO_2R^{a7}$ wherein R^{a1} , R^{a2} , R^{a3} and R^{a7} are as defined in (1).
 - (13) The therapeutic agent of any of (1) to (10) above, wherein at least one of R^1 , R^2 , R^3 and R^4 is $-\text{COOR}^{a1}$ wherein R^{a1} is glucuronic acid residue.
- 20 (14) The therapeutic agent of any of (1) to (10) above, wherein at least one of R^1 , R^2 , R^3 and R^4 is heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom.
- (15) The therapeutic agent of any of (1) to (14) above, wherein the ring Cy is cyclopentyl, cyclohexyl, cycloheptyl, tetrahydrothiopyranyl or piperidino.
 - (16) The therapeutic agent of any of (1) to (14) above, wherein the ring Cy is



wherein each symbol is as defined in (1).

- (17) The therapeutic agent of any of (1) to (16) above, wherein the ring A is C_{6-14} aryl.
- 5 (18) The therapeutic agent of any of (1) to (17) above, wherein at least one substituent optionally substituted by group A is a substituent substituted by C_{1-6} alkoxy C_{1-6} alkoxy.
- (19) The therapeutic agent of any of (1) to (17) above, wherein the Y is $-(CH_2)_m-CR^{a15}R^{a16}-(CH_2)_n-$ wherein each symbol is as defined in (1).
 - (20) The therapeutic agent of any of (1) to (19) above, wherein at least one group represented by Z is heterocycle C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the group D.
- 15 (21) The therapeutic agent of any of (1) to (19) above, wherein at least one group represented by Z is a heterocyclic group optionally substituted by 1 to 5 substituent(s) selected from the group D, wherein said heterocyclic group is selected from the following groups:



- wherein E^1 is an oxygen atom, a sulfur atom or $N(-R^{a35})$, E^2 is an oxygen atom, CH_2 or $N(-R^{a35})$, E^3 is an oxygen atom or a sulfur atom, wherein each R^{a35} is independently hydrogen atom or C_{1-6} alkyl, f is an integer of 1 to 3, and h and h' are the same or different and each is an integer of 1 to 3.
- 10 (22) The therapeutic agent of (21) above, wherein at least one group represented by Z is heterocyclic group optionally substituted by 1 to 5 substituent(s) selected from the group D

wherein said heterocyclic group is selected from the following groups:

wherein each symbol is as defined in (21).

- 5 (23) The therapeutic agent of any of (1) to (19) above, wherein at least one group represented by group D is $-(CH_2)_t-CONR^{a27}R^{a28}$ wherein each symbol is as defined in (1), and at least one of R^{a27} and R^{a28} is C_{1-6} alkoxy.
- (24) The therapeutic agent of any of (1) to (19) above, wherein at least one group represented by group D is $-(CH_2)_t-C(=NR^{a33})NH_2$ wherein each symbol is as defined in (1), and R^{a33} is hydroxyl group or C_{1-6} alkoxy.
- (25) The therapeutic agent of any of (1) to (19) above, wherein at least one group represented by group D is $-(CH_2)_t-O-(CH_2)_p-COR^{a21}$, wherein each symbol is as defined in (1), and R^{a21} is amino.
 - (26) The therapeutic agent of any of (1) to (19) above, wherein at least one group represented by group D is $-(CH_2)_t-NR^{a29}CO-R^{a24}$ wherein each symbol is as defined in (1), and R^{a24} is amino or C_{1-6} alkylamino.
- 20 (27) The therapeutic agent of any of (1) to (19) above, wherein at least one group represented by group D is $-(CH_2)_t-NR^{a22}R^{a23}$ wherein each symbol is as defined in claim 1, and at least one of R^{a22} and R^{a23} is amino or C_{1-6} alkylamino.
- (28) The therapeutic agent of any of (1) to (19) above, wherein at least one group represented by group D is heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom.
 - (29) A fused ring compound of the following formula [II]

30 wherein

the moiety

is a fused ring selected from

wherein R^1 , R^2 , R^3 and R^4 are each independently,

- (1) hydrogen atom,
- (2) C_{1-6} alkanoyl,
- (3) carboxyl,
- (4) cyano,
- 10 (5) nitro,

5

15

20

25

- (6) C_{1-6} alkyl optionally substituted by 1 to 3 substituent(s) selected from the following group A, group A; halogen atom, hydroxyl group, carboxyl, amino, C_{1-6} alkoxy, C_{1-6} alkoxy C_{1-6} alkoxy, C_{1-6} alkoxycarbonyl and C_{1-6} alkylamino,
- wherein R^{a1} is optionally substituted C_{1-6} alkyl (as defined above), C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the following group B or glucuronic acid residue, group B; halogen atom, cyano, nitro, C_{1-6} alkyl, halogenated C_{1-6} alkyl, C_{1-6} alkanoyl, $-(CH_2)_r-COOR^{b1}$, $-(CH_2)_r-CONR^{b1}R^{b2}$, $-(CH_2)_r-NR^{b1}R^{b2}$,
 - $\begin{array}{l} -\left(\text{CH}_{2}\right)_{r} \text{NR}^{\text{bl}} \text{COR}^{\text{b2}}, & -\left(\text{CH}_{2}\right)_{r} \text{NHSO}_{2}\text{R}^{\text{bl}}, & -\left(\text{CH}_{2}\right)_{r} \text{OR}^{\text{bl}}, \\ -\left(\text{CH}_{2}\right)_{r} \text{SR}^{\text{bl}}, & -\left(\text{CH}_{2}\right)_{r} \text{SO}_{2}\text{R}^{\text{bl}} \text{ and } -\left(\text{CH}_{2}\right)_{r} \text{SO}_{2}\text{NR}^{\text{bl}}\text{R}^{\text{b2}} \\ \text{wherein } \text{R}^{\text{bl}} \text{ and } \text{R}^{\text{b2}} \text{ are each independently} \\ \text{hydrogen atom or } \text{C}_{1-6} \text{ alkyl and r is 0 or an integer of 1 to 6,} \\ \end{array}$
 - (8) $-CONR^{a2}R^{a3}$ wherein R^{a2} and R^{a3} are each independently hydrogen atom,

 C_{1-6} alkoxy or optionally substituted C_{1-6} alkyl (as defined above),

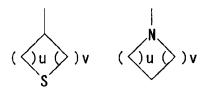
- (9) $-C = NR^{a4} NH_2$ wherein R^{a4} is hydrogen atom or hydroxyl group,
- (10) $-NHR^{a5}$ wherein R^{a5} is hydrogen atom, C_{1-6} alkanoyl or C_{1-6} alkylsulfonyl,
- (11) $-OR^{a6}$ wherein R^{a6} is hydrogen atom or optionally substituted C_{1-6} alkyl (as defined above),
- (12) $-SO_2R^{a7}$ wherein R^{a7} is hydroxyl group, amino, C_{1-6} alkyl or C_{1-6} alkylamino,
- (13) $-P(=O) (OR^{a31})_2$ wherein R^{a31} is hydrogen atom, optionally substituted C_{1-6} alkyl (as defined above) or C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

or

10

20

- (14) heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom, and
- R^7 is hydrogen atom or optionally substitute C_{1-6} alkyl (as defined above),
- 25 ring Cy' is
 - (1) C_{3-8} cycloalkyl optionally substituted by 1 to 5 substituent(s) selected from the following group C, group C; hydroxyl group, halogen atom, C_{1-6} alkyl and C_{1-6} alkoxy, or
- 30 (2)



wherein u and v are each independently an integer of 1 to 3,

ring A' is a group selected from a group consisting of phenyl, pyridyl, pyrazinyl, pyrimidinyl, pyridazinyl,

CA 02423800 2003-03-25 cyclohexyl, cyclohexenyl, furyl and thienyl, R^{5} and R^{6} are each independently (1) hydrogen atom, (2) halogen atom, (3) optionally substituted C_{1-6} alkyl (as defined above) or (4) hydroxyl group ring B is (1) C_{6-14} aryl, (2) C_{3-8} cycloalkyl or (3) heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom, is independently each Z (1) a group selected from the following group D, (2) C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the following group D, (3) C₃₋₈ cycloalkyl optionally substituted by 1 to 5 substituent(s) selected from the following group D, (4) C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the following group D, (5) heterocyclic group optionally substituted by 1 to 5 substituent(s) selected from the following group D wherein the heterocyclic group has 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom, or (6) heterocycle C₁₋₆ alkyl optionally substituted by 1 to 5 substituent(s) selected from the following group D

- (6) heterocycle C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the following group D wherein the heterocycle C_{1-6} alkyl is C_{1-6} alkyl substituted by heterocyclic group optionally substituted by 1 to 5 substituent(s) selected from the group D, as defined above,
 - group D:

5

10

15

20

25

30

- (a) hydrogen atom,
- (b) halogen atom,
- (c) cyano,
- (d) nitro,
- (e) optionally substituted C_{1-6} alkyl (as defined above),

	(f) - (CH2)t - CORa18,
	(hereinafter each t means independently 0 or an
	integer of 1 to 6),
	wherein R ^{a18} is
5	(1') optionally substituted C_{1-6} alkyl (as
	defined above),
	(2') C_{6-14} aryl optionally substituted by 1 to
	5 substituent(s) selected from the above
	group B or
0	(3') heterocyclic group optionally substituted
	by 1 to 5 substituent(s) selected from
	the above group B
	wherein the heterocyclic group has 1 to
	4 heteroatom(s) selected from an oxygen
15	atom, a nitrogen atom and a sulfur atom,
	(g) - (CH2)t-COORa19
	wherein R ^{a19} is hydrogen atom, optionally
	substituted C_{1-6} alkyl (as defined above) or
	C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1
20	to 5 substituent(s) selected from the above
	group B,
	(h) $-(CH_2)_t-CONR^{a27}R^{a28}$
	wherein R^{a27} and R^{a28} are each independently,
	(1') hydrogen atom,
?5	(2') optionally substituted C ₁₋₆ alkyl (as
	defined above),
	(3') C_{6-14} aryl optionally substituted by 1 to 5
	substituent(s) selected from the above group
	В,
30	(4') C_{6-14} aryl C_{1-6} alkyl optionally substituted
	by 1 to 5 substituent(s) selected from the
	above group B,
	(5') heterocyclic group optionally substituted
	by 1 to 5 substituent(s) selected from the
35	above group B,
	(6') heterocycle C ₁₋₆ alkyl optionally substituted by 1 to 5 substituent(s) selected
	SUDSIDED OV 1 10 J SUDSILILUENINS SELECTED

from the above group B,

wherein the heterocycle C_{1-6} alkyl is C_{1-6} alkyl substituted by heterocyclic group optionally substituted by 1 to 5 substituent(s) selected from the above group B, as defined above, (7') C_{3-8} cycloalkyl optionally substituted by 1 5 to 5 substituent(s) selected from the above group B, (8') C_{3-8} cycloalkyl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B, 10 (9') hydroxyl group or (10') C_{1-6} alkoxy, (i) $-(CH_2)_t-C(=NR^{a33})NH_2$ wherein R^{a33} is hydrogen atom, C_{1-6} alkyl, hydroxyl group or C_{1-6} alkoxy, 15 $(j) - (CH_2)_t - OR^{a20}$ wherein R^{a20} is (1') hydrogen atom, (2') optionally substituted C_{1-6} alkyl (as 20 defined above), (3') optionally substituted C2-6 alkenyl (as defined above), (4') C_{2-6} alkynyl optionally substituted by 1 to 3 substituent(s) selected from the above group A, 25 (5') C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B, (6') C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) 30 selected from the above group B, (7') heterocyclic group optionally substituted by 1 to 5 substituent(s) selected from the above group B, (8') heterocycle C₁₋₆ alkyl optionally 35 substituted by 1 to 5 substituent(s) selected from the above group B, (9') C₃₋₈ cycloalkyl optionally substituted by

	1 to 5 substituent(s) selected from the
	above group B, or
	(10') C ₃₋₈ cycloalkyl C ₁₋₆ alkyl optionally
	substituted by 1 to 5 substituent(s)
5	selected from the above group B,
	$(k) - (CH_2)_t - O - (CH_2)_p - COR^{a21}$
	wherein R^{a21} is amino, C_{1-6} alkylamino or
	heterocyclic group optionally substituted by
	1 to 5 substituent(s) selected from the above
10	group B,
	and p is 0 or an integer of 1 to 6,
	(1) - (CH2)t - NRa22Ra23
	wherein R ^{a22} and R ^{a23} are each independently
	(1') hydrogen atom,
15	(2') optionally substituted C_{1-6} alkyl (as
	defined above),
	(3') C_{6-14} aryl optionally substituted by 1 to
	5 substituent(s) selected from the above
	group B,
20	(4') C_{6-14} aryl C_{1-6} alkyl optionally
	substituted by 1 to 5 substituent(s)
	selected from the above group B,
	(5') heterocycle C_{1-6} alkyl optionally
	substituted by 1 to 5 substituent(s)
25	selected from the above group B or
	<pre>(6') heterocyclic group optionally</pre>
	substituted by 1 to 5 substituent(s)
	selected from the above group B,
	(m) $-(CH_2)_t-NR^{a29}CO-R^{a24}$
30	wherein R^{a29} is hydrogen atom, C_{1-6} alkyl or C_{1-6}
	alkanoyl, and
	R^{a24} is
	(1') amino,
	$(2')$ C_{1-6} alkylamino,
35	(3') optionally substituted C_{1-6}
	alkyl (as defined above),
	(4') C_{6-14} aryl optionally substituted by 1 to
	5 substituent(s) selected from the above

group B,

- (5') heterocyclic group optionally
 substituted by 1 to 5 substituent(s)
 selected from the above group B, or
- (6') heterocycle C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B,
- (n) $-(CH_2)_t-NR^{a29}SO_2-R^{a25}$ wherein R^{a29} is as defined above, and R^{a25} is hydrogen atom, optionally substituted C_{1-6} alkyl (as defined above), C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B or heterocyclic group optionally substituted by 1 to 5 substituent(s) selected from the above group B,
- (o) $-(CH_2)_t-S(0)_q-R^{a25}$ wherein R^{a25} is as defined above, and q is 0, 1 or 2,
- wherein R^{a26} is hydrogen atom, optionally
 substituted C₁₋₆ alkyl (as defined above),
 C₆₋₁₄ aryl optionally substituted by 1 to 5
 substituent(s) selected from the above group
 B or heterocyclic group optionally
 substituted by 1 to 5 substituent(s) selected
 from the above group B,

and

(q) heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom,

is an integer of 1 to 3, and

is

- (1) a single bond,
- (2) C_{1-6} alkylene,
- (3) C_{2-6} alkenylene,
- (4) $-(CH_2)_m-O-(CH_2)_n-$, (hereinafter m and n are each independently 0

5

10

15

20

25

30

W Y

or an integer of 1 to 6), (5) -CO-, (6) $-CO_2-(CH_2)_n-$, (7) $-\text{CONH}-(\text{CH}_2)_n-\text{NH}-$ 5 (8) $-NHCO_2-$, (9) -NHCONH-, (10) -O- $(CH_2)_n$ -CO-, (11) -O- $(CH_2)_n$ -O-, $(12) -SO_2-,$ $(13) - (CH₂)_m - NR^{a12} - (CH₂)_n -$ 10 wherein Rall is (1') hydrogen atom, (2') optionally substituted C_{1-6} alkyl (as defined above), (3') C_{6-14} aryl C_{1-6} alkyl optionally 15 substituted by 1 to 5 substituent(s) selected from the above group B, (4') C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above 20 group B, (5') -COR^{b5} wherein R^{b5} is hydrogen atom, optionally substituted C_{1-6} alkyl (as defined above), C_{6-14} aryl optionally substituted by 1 to 25 5 substituent(s) selected from the above group B or C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B, (6') -COOR^{b5} (R^{b5} is as defined above) or 30 (7') -SO₂R^{b5} (R^{b5} is as defined above), (14) $-NR^{a12}CO-$ (R^{a12} is as defined above), (15) -CONR^{a13}-(CH₂)_nwherein R^{a13} is hydrogen atom, optionally substituted C_{1-6} alkyl (as defined above) or 35 C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above

group B,

(16) -CONH-CHR^{a14}wherein R^{a14} is C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B, $(17) -O-(CH_2)_m-CR^{a15}R^{a16}-(CH_2)_n-$ 5 wherein Rals and Rals are each independently (1') hydrogen atom, (2') carboxyl, (3') C_{1-6} alkyl, (4') -OR^{b6} 10 wherein R^{b6} is C_{1-6} alkyl or C_{6-14} aryl C_{1-6} alkyl, (5') -NHR^{b7} wherein R^{b7} is hydrogen atom, C_{1-6} alkyl, C_{1-6} alkanoyl or C_{6-14} aryl C_{1-6} alkyloxycarbonyl, or 15 R^{a15} is optionally (6') $-(CH_2)_{n} - (Z') w'$ wherein n', ring B', Z' and w' are the same as the above-mentioned n, ring B, Z and w, 20 respectively, and may be the same as or different from the respective counterparts, (18) $-(CH_2)_n-NR^{a12}-CHR^{a15}-(R^{a12})$ and R^{a15} are each as defined above), $(19) - NR^{a17}SO_2 -$ 25 wherein R^{a17} is hydrogen atom or C_{1-6} alkyl, $(20) -S(0) = (CH_2)_m - CR^{a15}R^{a16} - (CH_2)_n - (e is 0, 1 or 2, 1)$ \textbf{R}^{al5} and \textbf{R}^{al6} are each as defined above), $(21) - (CH_2)_m - CR^{a15}R^{a16} - (CH_2)_n - (R^{a15})$ and R^{a16} are each 30 as defined above), or a pharmaceutically acceptable salt thereof.

(30) The fused ring compound of (29) above, which is represented by the following formula [II-1]

$$R^{2}$$
 R^{3}
 R^{4}
 Cy'
 $R^{5'}$
 $R^{6'}$
 $R^{6'}$
 $R^{6'}$
 $R^{6'}$
 $R^{6'}$

wherein each symbol is as defined in (29), or a pharmaceutically acceptable salt thereof.

(31) The fused ring compound of (29) above, which is represented 5 by the following formula [II-2]

$$R^2$$
 R^3
 R^4
 Cy
 R^5
 R^6
 R^6
 R^6
 R^6
 R^6
 R^6

wherein each symbol is as defined in (29), or a pharmaceutically acceptable salt thereof.

(32) The fused ring compound of (29) above, which is represented 10 by the following formula [II-3]

$$R^2$$
 R^3
 N
 R^5
 R^6
 R^6
 R^6
 R^6
 R^6
 R^6
 R^6

wherein each symbol is as defined in (29), or a pharmaceutically acceptable salt thereof.

(33) The fused ring compound of (29) above, which is represented by the following formula [II-4]

$$R^2$$
 R^3
 R^5
 $R^{5'}$
 $R^{6'}$
 $R^{6'}$
 $R^{6'}$
 $R^{6'}$
 $R^{6'}$

wherein each symbol is as defined in (29), or a pharmaceutically acceptable salt thereof.

(34) The fused ring compound of any of (29) to (33) above, 5 wherein at least one of R^1 , R^2 , R^3 and R^4 is carboxyl, $-COOR^{a1}$, $-CONR^{a2}R^{a3}$, $-SO_2R^{a7}$ (wherein R^{a1} , R^{a2} , R^{a3} and R^{a7} are as defined in (29)),

or a pharmaceutically acceptable salt thereof.

- 10 (35) The fused ring compound of (34) above, wherein at least one of R^1 , R^2 , R^3 and R^4 is carboxyl, $-\text{COOR}^{a1}$ or $-\text{SO}_2R^{a7}$ wherein R^{a1} and R^{a7} are as defined in (29), or a pharmaceutically acceptable salt thereof.
- (36) The fused ring compound of (35) above, wherein at least one of R¹, R², R³ and R⁴ is carboxyl or -COOR^{a1} wherein R^{a1} is as defined in (29), or a pharmaceutically acceptable salt thereof. (37) The fused ring compound of (36) above, wherein R² is carboxyl and R¹, R³ and R⁴ are hydrogen atoms, or a pharmaceutically acceptable salt thereof.
- 20 (38) The fused ring compound of any of (29) to (33) above, wherein at least one of R^1 , R^2 , R^3 and R^4 is $-COOR^{a1}$ wherein R^{a1} is glucuronic acid residue, or a pharmaceutically acceptable salt thereof.
- (39) The fused ring compound of any of (29) to (33) above,

 25 wherein at least one of R¹, R², R³ and R⁴ is heterocyclic group

 having 1 to 4 heteroatom(s) selected from an oxygen atom, a

 nitrogen atom and a sulfur atom, or a pharmaceutically acceptable
 salt thereof.

- (40) The fused ring compound of any of (29) to (39) above, wherein the ring Cy' is cyclopentyl, cyclohexyl, cycloheptyl or tetrahydrothiopyranyl, or a pharmaceutically acceptable salt thereof.
- 5 (41) The fused ring compound of (40) above, wherein the ring Cy' is cyclopentyl, cyclohexyl or cycloheptyl, or a pharmaceutically acceptable salt thereof.
 - (42) The fused ring compound of any of (29) to (39) above, wherein the ring Cy' is



10

- wherein each symbol is as defined in (29), or a pharmaceutically acceptable salt thereof.
- (43) The fused ring compound of any of (29) to (42) above, wherein the ring A' is phenyl, pyridyl, pyrazinyl, pyrimidinyl or pyridazinyl, or a pharmaceutically acceptable salt thereof.
 - (44) The fused ring compound of (43) above, wherein the ring A' is phenyl or pyridyl, or a pharmaceutically acceptable salt thereof.
- (45) The fused ring compound of (44) above, wherein the ring A' 20 is phenyl, or a pharmaceutically acceptable salt thereof.
 - (46) The fused ring compound of any of (29) to (45) above, wherein at least one substituent optionaly substituted by group A is a substituent substituted by C_{1-6} alkoxy, or a pharmaceutically acceptable salt thereof.
- 25 (47) The fused ring compound of any of (29) to (46) above, wherein the Y is $-(CH_2)_m-O-(CH_2)_n-$, $-NHCO_2-$, $-CONH-CHR^{a14}-$, $-(CH_2)_m-NR^{a12}-(CH_2)_n-$, $-CONR^{a13}-(CH_2)_n-$, $-O-(CH_2)_m-CR^{a15}R^{a16}-(CH_2)_n-$ or $-(CH_2)_n-NR^{a12}-CHR^{a15}-$ (wherein each symbol is as defined in (29)), or a pharmaceutically acceptable salt thereof.
- 30 (48) The fused ring compound of (47) above, wherein the Y is $-(CH_2)_m-O-(CH_2)_n-\text{ or }-O-(CH_2)_m-CR^{a15}R^{a16}-(CH_2)_n-\text{ (wherein each symbol is as defined in (29)), or a pharmaceutically acceptable salt thereof.$
 - (49) The fused ring compound of (48) above, wherein the Y is

 $-(CH_2)_m-O-(CH_2)_n-$ wherein each symbol is as defined in (29), or a pharmaceutically acceptable salt thereof.

(50) The fused ring compound of any of (29) to (46) above, wherein the Y is $-(CH_2)_m-CR^{a15}R^{a16}-(CH_2)_n-$ (wherein each symbol is as defined in (29)), or a pharmaceutically acceptable salt thereof.

(51) The fused ring compound of any of (29) to (50) above, wherein the R^2 is carboxyl, R^1 , R^3 and R^4 are hydrogen atoms, the ring Cy' is cyclopentyl, cyclohexyl or cycloheptyl, and the ring A' is phenyl, or a pharmaceutically acceptable salt thereof.

10 (52) The fused ring compound of any of (29) to (51) above, wherein at least one group represented by Z is heterocycle C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the group D, or a pharmaceutically acceptable salt thereof.

(53) The fused ring compound of any of (29) to (51) above,
15 wherein at least one group represented by Z is heterocyclic group optionally substituted by 1 to 5 substituent(s) selected from the group D, wherein said heterocyclic group is selected from the

following groups:

wherein E^1 is an oxygen atom, a sulfur atom or $N(-R^{a35})$, E^2 is an oxygen atom, CH_2 or $N(-R^{a35})$, E^3 is an oxygen atom or a sulfur atom, wherein each R^{a35} is independently hydrogen atom or C_{1-6} alkyl, f is an integer of 1 to 3, and h and h' are the same or different and each is an integer of 1 to 3, or a pharmaceutically acceptable salt thereof.

10 (54) The fused ring compound of (53) above, wherein at least one group represented by Z is heterocyclic group optionally substituted by 1 to 5 substituent(s) selected from the group D, wherein said heterocyclic group is selected from the following groups:

15

wherein each symbol is as defined in (53), or a pharmaceutically acceptable salt thereof.

- (55) The fused ring compound of any of (29) to (51) above, wherein at least one group represented by group D is $-(CH_2)_t$ 20 CONR^{a27}R^{a28} wherein each symbol is as defined in (29), and at least one of R^{a27} and R^{a28} is C_{1-6} alkoxy, or a pharmaceutically acceptable salt thereof.
- (56) The fused ring compound of any of (29) to (51) above, wherein at least one group represented by group D is $-(CH_2)_t-$ 25 $C(=NR^{a33})NH_2$ wherein each symbol is as defined in (29), and R^{a33} is

- hydroxyl group or C_{1-6} alkoxy, or a pharmaceutically acceptable salt thereof.
- (57) The fused ring compound of any of (29) to (51) above, wherein at least one group represented by group D is $-(CH_2)_t-O-$
- $_{5}$ (CH₂)_p-COR^{a21} wherein each symbol is as defined in (29), and R^{a21} is amino, or a pharmaceutically acceptable salt thereof.
 - (58) The fused ring compound of any of (29) to (51) above, wherein at least one group represented by group D is $-(CH_2)_t$ $NR^{a29}CO-R^{a24}$ wherein each symbol is as defined in (29), and R^{a24} is amino or C_{1-6} alkylamino, or a pharmaceutically acceptable salt
- 10 amino or C_{1-6} alkylamino, or a pharmaceutically acceptable salt thereof.
 - (59) The fused ring compound of any of (29) to (51) above, wherein at least one group represented by group D is $-(CH_2)_t$ $NR^{a22}R^{a23}$ wherein each symbol is as defined in (29), and at least one of R^{a22} and R^{a23} is spine of R^{a22} and R^{a23} is spine of R^{a24} .
- one of R^{a22} and R^{a23} is amino or C_{1-6} alkylamino, or a pharmaceutically acceptable salt thereof.
- (60) The fused ring compound of any of (29) to (51) above, wherein at least one group represented by group D is heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a 20 nitrogen atom and a sulfur atom, or a pharmaceutically acceptable salt thereof.
 - (61) The fused ring compound of the formula [I] or a pharmaceutically acceptable salt thereof, which is selected from the group consisting of
- ethyl 2-[4-(3-bromophenoxy)phenyl]-1-cyclohexylbenzimidazole-5-carboxylate (Example 1),
 - 2-[4-(3-bromophenoxy)phenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid (Example 2),
 - ethyl 1-cyclohexyl-2-(4-hydroxyphenyl)benzimidazole-5-
- 30 carboxylate (Example 3),
 - ethyl 2-[4-(2-bromo-5-chlorobenzyloxy)phenyl]-1-
 - cyclohexylbenzimidazole-5-carboxylate (Example 4),
 - ethyl 2-{4-[2-(4-chlorophenyl)-5-chlorobenzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylate (Example 5),
- 2-{4-[2-(4-chlorophenyl)-5-chlorobenzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid (Example 6), ethyl 2-[4-(2-bromo-5-methoxybenzyloxy)phenyl]-1-cyclohexylbenzimidazole-5-carboxylate (Example 7),

```
ethyl 2-\frac{4-[2-(4-\text{chlorophenyl})-5-\text{methoxybenzyloxy}]\text{phenyl}}{-1-}
   cyclohexylbenzimidazole-5-carboxylate (Example 8),
    2-\frac{4-[2-(4-chlorophenyl)-5-methoxybenzyloxylphenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 9),
 5 ethyl 1-cyclohexyl-2-{4-[(E)-2-phenylvinyl]phenylbenzimidazole-
   5-carboxylate (Example 10),
    1-cyclohexyl-2-{4-[(E)-2-phenylvinyl]phenyl}benzimidazole-5-
   carboxylic acid (Example 11),
    2-(4-benzyloxyphenyl)-1-cyclopentylbenzimidazole-5-carboxylic
10 acid (Example 12),
    2-(4-benzyloxyphenyl)-1-cyclopentylbenzimidazole-5-carboxamide
   (Example 13),
    2-(4-benzyloxyphenyl)-5-cyano-1-cyclopentylbenzimidazole
   (Example 14),
15 2-(4-benzyloxyphenyl)-1-cyclopentylbenzimidazole-5-carboxamide
   oxime (Example 15),
    ethyl 1-cyclohexyl-2-4-[4-(4-fluorophenyl)-2-methyl-5-
   thiazolyl methoxy] phenyl benzimidazole-5-carboxylate (Example 16),
    1-\text{cyclohexyl}-2-\frac{4-\frac{4-4-4-6}{4-6}}{2-6}
20 methoxy]phenyl benzimidazole-5-carboxylic acid (Example 17),
    ethyl 1-cyclohexyl-2-(2-fluoro-4-hydroxyphenyl)benzimidazole-5-
   carboxylate (Example 18),
    ethyl 2-{4-[bis(3-fluorophenyl)methoxy]-2-fluorophenyl}-1-
   cyclohexylbenzimidazole-5-carboxylate (Example 19),
25 2-\frac{4-[bis(3-fluorophenyl)methoxy]-2-fluorophenyl}{-1-}
   cyclohexylbenzimidazole-5-carboxylic acid (Example 20),
    ethyl 1-cyclopentyl-2-(4-nitrophenyl)benzimidazole-5-carboxylate
   (Example 21),
    ethyl 2-(4-aminophenyl)-1-cyclopentylbenzimidazole-5-carboxylate
30 (Example 22),
    ethyl 2-(4-benzoylaminophenyl)-1-cyclopentylbenzimidazole-5-
   carboxylate (Example 23),
    2-(4-benzoylaminophenyl)-1-cyclopentylbenzimidazole-5-carboxylic
   acid (Example 24),
ethyl 2-\{4-[3-(3-chlorophenyl)phenoxy]phenyl\}-1-
   cyclohexylbenzimidazole-5-carboxylate (Example 25),
    2-\{4-[3-(3-chlorophenyl)phenoxy]phenyl\}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 26),
```

```
ethyl 2-[4-(3-acetoxyphenyloxy)phenyl]-1-
   cyclohexylbenzimidazole-5-carboxylate (Example 27),
    ethyl 1-cyclohexyl-2-[4-(3-hydroxyphenyloxy)phenyl]-
   benzimidazole-5-carboxylate (Example 28),
 5 ethyl 1-cyclohexyl-2-{4-[3-(4-pyridylmethoxy)phenyloxy]phenyl}-
   benzimidazole-5-carboxylate (Example 29),
    1-cyclohexyl-2-{4-[3-(4-pyridylmethoxy) phenyloxy] phenyl}-
   benzimidazole-5-carboxylic acid (Example 30),
    2-(4-benzyloxyphenyl)-1-cyclopentylbenzimidazole (Example 31),
   ethyl 2-(4-benzyloxyphenyl)-1-cyclopentylbenzimidazole-5-
   carboxylate (Example 32),
    2-(4-benzyloxyphenyl)-1-cyclopentyl-N, N-dimethylbenzimidazole-5-
   carboxamide (Example 33),
    2-(4-benzyloxyphenyl)-1-cyclopentyl-N-methoxy-N-
15 methylbenzimidazole-5-carboxamide (Example 34),
    2-(4-benzyloxyphenyl)-1-cyclopentyl-5-(1-hydroxy-1-
   methylethyl)benzimidazole (Example 35),
    5-acetyl-2-(4-benzyloxyphenyl)-1-cyclopentylbenzimidazole
   (Example 36),
  2-(4-benzyloxyphenyl)-1-cyclopentyl-N-(2-dimethylaminoethyl)-
   benzimidazole-5-carboxamide dihydrochloride (Example 37),
    2-(4-benzyloxyphenyl)-1-cyclopentyl-5-nitrobenzimidazole
   (Example 38),
    5-amino-2-(4-benzyloxyphenyl)-1-cyclopentylbenzimidazole
25 hydrochloride (Example 39),
    5-acetylamino-2-(4-benzyloxyphenyl)-1-cyclopentylbenzimidazole
   (Example 40),
    2-(4-benzyloxyphenyl)-1-cyclopentyl-5-methanesulfonyl-
   aminobenzimidazole (Example 41),
30 5-sulfamoyl-2-(4-benzyloxyphenyl)-1-cyclopentylbenzimidazole
   (Example 42),
    2-[4-(4-tert-butylbenzyloxy)phenyl]-1-cyclopentylbenzimidazole-
   5-carboxylic acid (Example 43),
    2-[4-(4-carboxybenzyloxy)phenyl]-1-cyclopentylbenzimidazole-5-
35 carboxylic acid (Example 44),
    2-[4-(4-chlorobenzyloxy)phenyl]-1-cyclopentylbenzimidazole-5-
   carboxylic acid (Example 45),
```

```
2-\{4-[(2-\text{chloro}-5-\text{thienyl})\text{methoxy}]\text{phenyl}\}-1-
   cyclopentylbenzimidazole-5-carboxylic acid (Example 46),
    1-cyclopentyl-2-[4-(4-trifluoromethylbenzyloxy)phenyl]-
   benzimidazole-5-carboxylic acid (Example 47),
5 1-cyclopentyl-2-[4-(4-methoxybenzyloxy)phenyl]benzimidazole-5-
   carboxylic acid (Example 48),
    1-cyclopentyl-2-[4-(4-pyridylmethoxy)phenyl]benzimidazole-5-
   carboxylic acid hydrochloride (Example 49),
    1-cyclopentyl-2-[4-(4-methylbenzyloxy)phenyl]benzimidazole-5-
10 carboxylic acid (Example 50),
    1-cyclopentyl-2-{4-[(3,5-dimethyl-4-isoxazolyl)methoxy]phenyl}-
   benzimidazole-5-carboxylic acid (Example 51),
    1-cyclopentyl-2-(4-hydroxyphenyl)benzimidazole-5-carboxylic acid
   (Example 52),
   [2-(4-benzyloxyphenyl)-1-cyclopentylbenzimidazol-5-yl]-
   carbonylaminoacetic acid (Example 53),
    2-[4-(2-chlorobenzyloxy)phenyl]-1-cyclopentylbenzimidazole-5-
   carboxylic acid (Example 54),
    2-[4-(3-chlorobenzyloxy)phenyl]-1-cyclopentylbenzimidazole-5-
20 carboxylic acid (Example 55),
    2-(4-benzyloxyphenyl)-3-cyclopentylbenzimidazole-5-carboxylic
   acid (Example 56),
    2-[4-(benzenesulfonylamino)phenyl]-1-cyclopentylbenzimidazole-5-
   carboxylic acid (Example 57),
25 1-cyclopentyl-2-[4-(3,5-dichlorophenylcarbonylamino)phenyl]-
   benzimidazole-5-carboxylic acid (Example 58),
    2-{4-[(4-chlorophenyl)carbonylamino]phenyl}-1-
   cyclopentylbenzimidazole-5-carboxylic acid (Example 59),
    2-{4-[(4-tert-butylphenyl)carbonylamino]phenyl}-1-
30 cyclopentylbenzimidazole-5-carboxylic acid (Example 60),
    2-{4-[(4-benzyloxyphenyl)carbonylamino]phenyl}-1-
   cyclopentylbenzimidazole-5-carboxylic acid (Example 61),
    trans-4-[2-(4-benzyloxyphenyl)-5-carboxybenzimidazol-1-
   yl]cyclohexan-1-ol (Example 62),
35 trans-1-[2-(4-benzyloxyphenyl)-5-carboxybenzimidazol-1-yl]-4-
   methoxycyclohexane (Example 63),
    2-(4-benzyloxyphenyl)-5-carboxymethyl-1-cyclopentylbenzimidazole
   (Example 64),
```

```
2-[1-benzyloxycarbonyl-4-piperidyl]-1-cyclopentylbenzimidazole-
   5-carboxylic acid (Example 65),
   2-[(4-cyclohexylphenyl)carbonylamino]-1-
   cyclopentylbenzimidazole-5-carboxylic acid (Example 66),
5 1-cyclopentyl-2-[4-(3,5-dichlorobenzyloxy)phenyl]benzimidazole-
   5-carboxylic acid (Example 67),
    1-cyclopentyl-2-[4-(3,4-dichlorobenzyloxy)phenyl]benzimidazole-
   5-carboxylic acid (Example 68),
    1-cyclopentyl-2-[4-(phenylcarbamoylamino)phenyl]benzimidazole-5-
10 carboxylic acid (Example 69),
    1-cyclopentyl-2-[4-(diphenylmethoxy)phenyl]benzimidazole-5-
   carboxylic acid (Example 70),
    1-cyclopentyl-2-(4-phenethyloxyphenyl)benzimidazole-5-carboxylic
   acid (Example 71),
15 trans-1-[2-(4-benzyloxyphenyl)-5-carboxybenzimidazol-1-yl]-4-
   tert-butylcyclohexane (Example 72),
    2-(4-benzyloxyphenyl)-5-carboxymethoxy-1-
   cyclopentylbenzimidazole (Example 73),
    2-(4-benzylaminophenyl)-1-cyclopentylbenzimidazole-5-carboxylic
20 acid (Example 74),
    2-[4-(N-benzenesulfonyl-N-methylamino)phenyl]-1-
   cyclopentylbenzimidazole-5-carboxylic acid (Example 75),
    2-[4-(N-benzyl-N-methylamino)phenyl]-1-cyclopentylbenzimidazole-
   5-carboxylic acid (Example 76),
25 1-cyclohexyl-2-(4-phenethylphenyl)benzimidazole-5-carboxylic
   acid (Example 77),
    2-(1-benzyl-4-piperidyl)-1-cyclopentylbenzimidazole-5-carboxylic
   acid (Example 78),
    2-(1-benzoyl-4-piperidyl)-1-cyclopentylbenzimidazole-5-
30 carboxylic acid (Example 79),
    1-cyclopentyl-2-[1-(p-toluenesulfonyl)-4-piperidyl]-
   benzimidazole-5-carboxylic acid (Example 80),
    1-cyclohexyl-2-[4-(3,5-dichlorobenzyloxy)phenyl]benzimidazole-5-
   carboxylic acid (Example 81),
35 1-cyclohexyl-2-[4-(diphenylmethoxy)phenyl]benzimidazole-5-
   carboxylic acid (Example 82),
    1-cyclohexyl-2-[4-(3,5-di-tert-butylbenzyloxy)phenyl]-
   benzimidazole-5-carboxylic acid (Example 83),
```

```
2-(4-benzyloxyphenyl)-1-(4-methylcyclohexyl)benzimidazole-5-
   carboxylic acid (Example 84),
    1-cyclohexyl-2-{4-[2-(2-naphthyl)ethoxy]phenyl}benzimidazole-5-
   carboxylic acid (Example 85),
 5 1-cyclohexyl-2-[4-(1-naphthyl)methoxyphenyl]benzimidazole-5-
   carboxylic acid (Example 86),
    1-cyclohexyl-2-[4-(dibenzylamino)phenyl]benzimidazole-5-
   carboxylic acid (Example 87),
    2-[4-(2-biphenylylmethoxy)phenyl]-1-cyclohexylbenzimidazole-5-
10 carboxylic acid (Example 88),
    2-(4-benzyloxyphenyl)-1-cyclohexylbenzimidazole-5-carboxylic
   acid (Example 89),
    1-cyclohexyl-2-[4-(dibenzylmethoxy)phenyl]benzimidazole-5-
   carboxylic acid (Example 90),
15 2-(4-benzoylmethoxyphenyl)-1-cyclohexylbenzimidazole-5-
   carboxylic acid (Example 91),
    2-(4-benzyl-1-piperazinyl)-1-cyclohexylbenzimidazole-5-
   carboxylic acid dihydrochloride (Example 92),
    1-cyclohexyl-2-[4-(3,3-diphenylpropyloxy)phenyl]benzimidazole-5-
20 carboxylic acid (Example 93),
    2-[4-(3-chloro-6-phenylbenzyloxy)phenyl]-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 94),
    2-(4-benzyloxypiperidino)-1-cyclohexylbenzimidazole-5-carboxylic
   acid (Example 95),
25 1-cyclohexyl-2-{4-[2-(phenoxy)ethoxy]phenyl}benzimidazole-5-
   carboxylic acid (Example 96),
    1-cyclohexyl-2-[4-(3-phenylpropyloxy)phenyl]benzimidazole-5-
   carboxylic acid (Example 97),
    1-cyclohexyl-2-[4-(5-phenylpentyloxy)phenyl]benzimidazole-5-
30 carboxylic acid (Example 98),
    2-(3-benzyloxy-5-isoxazolyl)-1-cyclohexylbenzimidazole-5-
   carboxylic acid (Example 99),
    2-(2-benzyloxy-5-pyridyl)-1-cyclohexylbenzimidazole-5-carboxylic
   acid (Example 100),
35 1-cyclohexyl-2-\{4-[2-(3,4,5-trimethoxyphenyl) ethoxy]phenyl\}-
   benzimidazole-5-carboxylic acid (Example 101),
   2-(4-benzyloxyphenyl)-1-(4,4-dimethylcyclohexyl)benzimidazole-5-
   carboxylic acid (Example 102),
```

```
1-cyclohexyl-2-{4-[2-(1-naphthyl)ethoxy]phenyl}benzimidazole-5-
   carboxylic acid (Example 103),
    2-[4-(2-benzyloxyphenoxy)phenyl]-1-cyclohexylbenzimidazole-5-
   carboxylic acid (Example 104),
 5 2-[4-(3-benzyloxyphenoxy)phenyl]-1-cyclohexylbenzimidazole-5-
   carboxylic acid (Example 105),
    1-cyclohexyl-2-[4-(2-hydroxyphenoxy)phenyl]benzimidazole-5-
   carboxylic acid (Example 106),
    1-cyclohexyl-2-[4-(3-hydroxyphenoxy)phenyl]benzimidazole-5-
10 carboxylic acid (Example 107),
    1-cyclohexyl-2-[4-(2-methoxyphenoxy)phenyl]benzimidazole-5-
   carboxylic acid (Example 108),
    1-cyclohexyl-2-[4-(3-methoxyphenoxy)phenyl]benzimidazole-5-
   carboxylic acid (Example 109),
15 1-cyclohexyl-2-[4-(2-propoxyphenoxy) phenyl]benzimidazole-5-
   carboxylic acid (Example 110),
    1-cyclohexyl-2-[4-(3-propoxyphenoxy)phenyl]benzimidazole-5-
   carboxylic acid (Example 111),
    1-cvclohexvl-2-{4-[2-(3-methyl-2-butenyloxy)phenoxy]phenyl}-
20 benzimidazole-5-carboxylic acid (Example 112),
    1-cyclohexyl-2-{4-[3-(3-methyl-2-butenyloxy)phenoxy]phenyl}-
   benzimidazole-5-carboxylic acid (Example 113),
    1-cyclohexyl-2-[4-(2-isopentyloxyphenoxy)phenyl]benzimidazole-5-
   carboxylic acid (Example 114),
25 1-cyclohexyl-2-[4-(3-isopentyloxyphenoxy)phenyl]benzimidazole-5-
   carboxylic acid (Example 115),
    1-\text{cyclohexyl}-2-\frac{1}{4}-\frac{10}{11}-\text{dihydro}-5H-\text{dibenzo[b,f]azepin}-5-
   yl)ethoxy]phenylbenzimidazole-5-carboxylic acid (Example 116),
    1-cyclohexyl-2-{4-[2-(4-trifluoromethylphenyl)benzyloxy]-
30 phenyl benzimidazole-5-carboxylic acid (Example 117),
    2-\{4-[bis(4-chlorophenyl)methoxy]phenyl\}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 118),
    1-\text{cyclohexyl-}2-\{4-[2-(4-\text{methoxyphenyl}) \text{ ethoxy}] \text{ phenyl}\}-
   benzimidazole-5-carboxylic acid (Example 119),
35 1-cyclohexyl-2-{4-[2-(2-methoxyphenyl)ethoxy]phenyl}-
   benzimidazole-5-carboxylic acid (Example 120),
    1-cyclohexyl-2-{4-[2-(3-methoxyphenyl)ethoxy]phenyl}-
   benzimidazole-5-carboxylic acid (Example 121),
```

```
2-(4-benzyloxyphenyl)-1-cycloheptylbenzimidazole-5-carboxylic
  acid (Example 122),
   1-cyclohexyl-2-[4-(2-phenethyloxyphenoxy)phenyl]benzimidazole-5-
  carboxylic acid (Example 123),
5 1-cyclohexyl-2-[4-(3-phenethyloxyphenoxy)phenyl]benzimidazole-5-
   carboxylic acid (Example 124),
   1-cyclohexyl-2-[4-(2,2-diphenylethoxy)phenyl]benzimidazole-5-
   carboxylic acid (Example 125),
   2-(4-benzyloxyphenyl)-1-(3-cyclohexenyl)benzimidazole-5-
10 carboxylic acid (Example 126),
   cis-1-[2-(4-benzyloxyphenyl)-5-carboxybenzimidazol-1-yl]-4-
   fluorocyclohexane (Example 127),
    1-cyclohexyl-2-[4-(2-phenoxyphenoxy)phenyl]benzimidazole-5-
   carboxylic acid (Example 128),
15 1-cyclohexyl-2-[4-(3-phenoxyphenoxy)phenyl]benzimidazole-5-
   carboxylic acid (Example 129),
    2-4-[(2R)-2-benzyloxycarbonylamino-2-phenylethoxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 130),
    1-cyclohexyl-2-{2-fluoro-4-[2-(4-trifluoromethylphenyl)-
20 benzyloxy]phenyl benzimidazole-5-carboxylic acid (Example 131),
    2-[4-(4-benzyloxyphenoxy)phenyl]-1-cyclohexylbenzimidazole-5-
   carboxylic acid (Example 132),
    2-{4-[bis(4-methylphenyl)methoxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 133),
25 2-{4-[bis(4-fluorophenyl)methoxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 134),
    1-cyclohexyl-6-methoxy-2-[4-(3-phenylpropoxy)phenyl]-
   benzimidazole-5-carboxylic acid (Example 135),
    1-cyclohexyl-6-hydroxy-2-[4-(3-phenylpropoxy)phenyl]-
30 benzimidazole-5-carboxylic acid (Example 136),
    1-cyclohexyl-6-methyl-2-[4-(3-phenylpropoxy)phenyl]-
   benzimidazole-5-carboxylic acid (Example 137),
    2-\{4-[2-(2-benzyloxyphenyl)ethoxy]phenyl\}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 138),
2-\{4-[2-(3-benzyloxyphenyl) ethoxy]phenyl\}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 139),
    2-[4-(2-carboxymethyloxyphenoxy)phenyl]-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 140),
```

```
2-[4-(3-carboxymethyloxyphenoxy)phenyl]-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 141),
    2-{4-[3-chloro-6-(4-methylphenyl)benzyloxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 142),
5 2-{4-[3-chloro-6-(4-methoxyphenyl)benzyloxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 143),
    1-cyclohexyl-2-{2-methyl-4-[2-(4-trifluoromethylphenyl)-
   benzyloxy]phenylbenzimidazole-5-carboxylic acid (Example 144),
    2-\{4-[2-(4-tert-butylphenyl)-5-chlorobenzyloxy]phenyl\}-1-
10 cyclohexylbenzimidazole-5-carboxylic acid (Example 145),
    2-{4-(3-chloro-6-phenylbenzyloxy)-2-fluorophenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 146),
    2-{4-[3-chloro-6-(3,5-dichlorophenyl)benzyloxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 147),
15 2-\frac{4-[bis(4-fluorophenyl)methoxy]-2-fluorophenyl}{-1-}
   cyclohexylbenzimidazole-5-carboxylic acid (Example 148),
    2-{4-(4-benzyloxyphenoxy)-2-chlorophenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 149),
    2-{4-(4-benzyloxyphenoxy)-2-trifluoromethylphenyl}-1-
20 cyclohexylbenzimidazole-5-carboxylic acid (Example 150),
    2-{4-[3-chloro-6-(2-trifluoromethylphenyl)benzyloxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 151),
    2-\{4-[(2R)-2-amino-2-phenylethoxy]phenyl\}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 152),
25 2-[4-(2-biphenylyloxy)phenyl]-1-cyclohexylbenzimidazole-5-
   carboxylic acid (Example 153),
    2-[4-(3-biphenylyloxy)phenyl]-1-cyclohexylbenzimidazole-5-
   carboxylic acid (Example 154),
    2-{4-[2-{(1-tert-butoxycarbonyl-4-piperidyl)methoxy{phenoxy}-
30 phenyl \-1-cyclohexylbenzimidazole-5-carboxylic acid (Example 155),
    2-{4-[3-{(1-tert-butoxycarbonyl-4-piperidyl)methoxy}phenoxy]-
   phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid (Example 156),
    2-\{4-[3-chloro-6-(3,4,5-trimethoxyphenyl)benzyloxy]phenyl\}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 157),
35 2-{4-[2-(2-biphenylyl)ethoxy]phenyl}-1-cyclohexylbenzimidazole-5-
   carboxylic acid (Example 158),
    2-[4-(2-biphenylylmethoxy)phenyl]-1-cyclohexylbenzimidazole-5-
   carboxylic acid (Example 159),
```

```
1-cvclohexvl-2-{4-[2-(4-piperidylmethoxy)phenoxy]phenyl}-
   benzimidazole-5-carboxylic acid hydrochloride (Example 160),
    1-cyclohexyl-2-{4-[3-(4-piperidylmethoxy)phenoxy]phenyl}-
   benzimidazole-5-carboxylic acid hydrochloride (Example 161),
 5 2-\{4-[(2R)-2-acetylamino-2-phenylethoxy]phenyl\}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 162),
    1-cyclohexyl-2-{4-[3-(4-methyl-3-pentenyloxy)phenoxy]phenyl}-
   benzimidazole-5-carboxylic acid (Example 163),
    1-cyclohexyl-2-{4-[3-(3-methyl-3-butenyloxy)phenoxy]phenyl}-
10 benzimidazole-5-carboxylic acid (Example 164),
    2-{4-[{(2S)-1-benzyl-2-pyrrolidinyl}methoxy]phenyl}-1-cyclohexyl-
   benzimidazole-5-carboxylic acid hydrochloride (Example 165),
    2-\frac{4-[3-chloro-6-(4-methylthiophenyl)benzyloxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 166),
2-\frac{4-[3-chloro-6-(4-methanesulfonylphenyl)benzyloxy]phenyl}{-1-}
   cyclohexylbenzimidazole-5-carboxylic acid (Example 167),
    2-\{4-[3-chloro-6-(2-thienyl)benzyloxy]phenyl\}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 168),
    2-{4-[3-chloro-6-(3-chlorophenyl)benzyloxy]phenyl}-1-
20 cyclohexylbenzimidazole-5-carboxylic acid (Example 169),
    2-\{4-[3-chloro-6-(3-pyridyl)benzyloxy]phenyl\}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 170),
    2-\d-[3-chloro-6-(4-fluorophenyl)benzyloxy]phenyl\-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 171),
25 2-[4-(4-benzyloxyphenoxy)-3-fluorophenyl]-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 172),
    2-[4-(2-bromo-5-chlorobenzyloxy)phenyl]-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 173),
    2-{4-[3-chloro-6-(4-chlorophenyl)benzyloxy]-2-fluorophenyl}-1-
30 cyclohexylbenzimidazole-5-carboxylic acid (Example 174),
    2-{4-[2-{(1-acetyl-4-piperidyl)methoxy}phenoxy]phenvl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 175),
    2-\{4-[3-\{(1-acetyl-4-piperidyl)\}\}\}
   cyclohexylbenzimidazole-5-carboxylic acid (Example 176),
35 l-cyclohexyl-2-{4-[3-(2-propynyloxy)phenoxy]phenyl}benzimidazole-
   5-carboxylic acid (Example 177),
   1-cyclohexyl-2-{4-[3-(3-pyridylmethoxy)phenoxy]phenyl}-
   benzimidazole-5-carboxylic acid (Example 178),
```

```
2-(4-benzyloxy-2-methoxyphenyl)-1-cyclohexylbenzimidazole-5-
   carboxylic acid (Example 179),
    2-[4-(2-bromo-5-methoxybenzyloxy)phenyl]-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 180),
5 2-[4-(carboxydiphenylmethoxy)phenyl]-1-cyclohexylbenzimidazole-
   5-carboxylic acid (Example 181),
    2-\{4-[2-(4-chlorophenyl)-5-nitrobenzyloxy]phenyl\}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 182),
    2-\{4-[3-acetylamino-6-(4-chlorophenyl)benzyloxy]phenyl\}-1-
10 cyclohexylbenzimidazole-5-carboxylic acid (Example 183),
    2-\{4-[2-(4-carboxyphenyl)-5-chlorobenzyloxy]phenyl\}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 184),
    2-{4-[{(2S)-1-benzyloxycarbonyl-2-pyrrolidinyl}methoxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 185),
2-\frac{2-\text{chloro}-4-[2-(4-\text{trifluoromethylphenyl})benzyloxy]phenyl}{-1-}
   cyclohexylbenzimidazole-5-carboxylic acid (Example 186),
    1-cyclohexyl-2-{4-[3-(2-pyridylmethoxy)phenoxy]phenyl}-
   benzimidazole-5-carboxylic acid (Example 187),
    2-\{4-[2-(4-chlorophenyl)-5-fluorobenzyloxy]phenyl\}-1-
20 cyclohexylbenzimidazole-5-carboxylic acid (Example 188),
    2-{4-[3-carboxy-6-(4-chlorophenyl)benzyloxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 189),
    2-{4-[3-carbamoyl-6-(4-chlorophenyl)benzyloxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 190),
25 1-cyclohexyl-2-{4-[2-(dimethylcarbamoylmethoxy)phenoxy]-
   phenyl benzimidazole-5-carboxylic acid (Example 191),
    1-cyclohexyl-2-{4-[2-(piperidinocarbonylmethoxy) phenoxy]-
   phenyl benzimidazole-5-carboxylic acid (Example 192),
    2-{4-[{(2S)-1-benzenesulfonyl-2-pyrrolidinyl/methoxy]phenyl}-1-
30 cyclohexylbenzimidazole-5-carboxylic acid (Example 193),
    2-{4-[{(2S)-1-benzoyl-2-pyrrolidinyl}methoxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 194),
    2-{4-[2-(4-carbamoylphenyl)-5-chlorobenzyloxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 195),
35 1-cyclohexyl-2-{4-[3-(dimethylcarbamoylmethoxy)phenoxy]-
   phenyl benzimidazole-5-carboxylic acid (Example 196),
    1-cyclohexyl-2-{4-[3-(piperidinocarbonylmethoxy)phenoxy]-
   phenyl benzimidazole-5-carboxylic acid (Example 197),
```

```
1-cyclohexyl-2-{4-[3-{(1-methanesulfonyl-4-piperidyl)methoxy}-
   phenoxy]phenyl benzimidazole-5-carboxylic acid (Example 198),
    1-\text{cyclohexyl}-2-\{4-[\{2-\text{methyl}-5-(4-\text{chlorophenyl})-4-\text{oxazolyl}\}-
   methoxy]phenyl benzimidazole-5-carboxylic acid (Example 199),
   2-4-[3-(3-chlorobenzyloxy)] phenoxy] phenyl-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 200),
    2-\frac{4-[3-(4-chlorobenzyloxy)phenoxy]phenyl}{-1-}
   cyclohexylbenzimidazole-5-carboxylic acid (Example 201),
    1-cyclohexyl-2-{4-[3-(4-fluorobenzyloxy)phenoxy]phenyl}-
10 benzimidazole-5-carboxylic acid (Example 202),
    1-\text{cyclohexyl}-2-\{4-[\{(2S)-1-(4-\text{nitrophenyl})-2-\text{pyrrolidinyl}\}-
   methoxy]phenyl benzimidazole-5-carboxylic acid (Example 203),
    1-cyclohexyl-2-{4-[{(2S)-1-phenyl-2-pyrrolidinyl}methoxy]-
   phenyl/benzimidazole-5-carboxylic acid hydrochloride (Example
15 204),
    2-\frac{4-[(2S)-1-(4-acetylaminophenyl)-2-pyrrolidinyl)}{methoxy}
   phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid (Example 205),
    2-\frac{4-[5-(4-\text{chlorophenyl})-2-\text{methyl}-4-\text{thiazolyl}}{\text{methoxylphenyl}}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 206),
20 2-{4-[bis(3-fluorophenyl)methoxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 207),
    1-cyclohexyl-2-{4-[2-(4-chlorophenyl)-3-nitrobenzyloxy]phenyl}-
   benzimidazole-5-carboxylic acid (Example 208),
    1-cyclohexyl-2-{4-[3-(4-tetrahydropyranyloxy)phenoxy]phenyl}-
25 benzimidazole-5-carboxylic acid (Example 209),
    1-cyclohexyl-2-{4-[3-(4-trifluoromethylbenzyloxy)phenoxy]phenyl}-
   benzimidazole-5-carboxylic acid (Example 210),
    1-cyclohexyl-2-{4-[3-{(1-methyl-4-piperidyl)methoxy}phenoxy]-
   phenyl benzimidazole-5-carboxylic acid (Example 211),
    2-{4-[3-(4-tert-butylbenzyloxy)phenoxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 212),
    2-4-[3-(2-chlorobenzyloxy)] phenoxy] phenyl\{-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 213),
    1-cyclohexyl-2-{4-[3-(3-pyridyl)phenoxy]phenyl}benzimidazole-5-
35 carboxylic acid (Example 214),
    2-\{4-[3-(4-chlorophenyl)phenoxy]phenyl\}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 215),
```

```
1-cyclohexyl-2-{4-[3-(4-methoxyphenyl)phenoxy]phenyl}-
       benzimidazole-5-carboxylic acid (Example 216),
          1-\text{cyclohexyl}-2-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{
        thiazolyl methoxy] phenyl benzimidazole-5-carboxylic acid (Example
 5 217),
          2-\frac{4-[4-(4-chlorophenyl)-2-methyl-5-thiazolyl\methoxy]phenyl}{-1-}
        cyclohexylbenzimidazole-5-carboxylic acid (Example 218),
          2-\{4-[1-(4-\text{chlorobenzyl})-3-\text{piperidyloxy}] \text{ phenyl}\}-1-
        cyclohexylbenzimidazole-5-carboxylic acid (Example 219),
10 1-cyclohexyl-2-{4-[3-{(2-methyl-4-thiazolyl)methoxy}phenoxy]-
        phenyl benzimidazole-5-carboxylic acid (Example 220),
           1-cyclohexyl-2-{4-[3-{(2,4-dimethyl-5-thiazolyl)methoxy}phenoxy]-
        phenyl}benzimidazole-5-carboxylic acid (Example 221),
           1-cyclohexyl-2-{4-[3-(3,5-dichlorophenyl)phenoxy]phenyl}-
15 benzimidazole-5-carboxylic acid (Example 222),
           2-\{4-[1-(4-chlorobenzyl)-4-piperidyloxy]phenyl\}-1-
        cyclohexylbenzimidazole-5-carboxylic acid (Example 223),
           2-{4-[3-(4-chlorobenzyloxy)piperidino]phenyl}-1-
        cyclohexylbenzimidazole-5-carboxylic acid (Example 224),
          2-{4-[4-carbamoyl-2-(4-chlorophenyl)benzyloxy]phenyl}-1-
        cyclohexylbenzimidazole-5-carboxylic acid (Example 225),
           2-{4-[4-(4-chlorobenzyloxy)piperidino]phenyl}-1-
        cyclohexylbenzimidazole-5-carboxylic acid (Example 226),
           2-{4-[3-{(2-chloro-4-pyridyl)methoxy}phenoxy]phenyl}-1-
25 cyclohexylbenzimidazole-5-carboxylic acid (Example 227),
           2-4-[(2S)-1-(4-dimethylcarbamoylphenyl)-2-pyrrolidinyl}-
        methoxylphenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
          (Example 228),
           2-\{4-[2-(4-chlorophenyl)-5-ethoxycarbonylbenzyloxy]phenyl\}-1-
30 cyclohexylbenzimidazole-5-carboxylic acid (Example 229),
           1-cyclohexyl-2-[4-(3-trifluoromethylphenoxy)phenyl]-
         benzimidazole-5-carboxylic acid (Example 230),
           1-\text{cyclohexyl}-2-\left\{4-\left[\left\{4-\left(4-\text{dimethylcarbamoylphenyl}\right)-2-\text{methyl}-5-\right.\right\}\right\}
         thiazolyl methoxy] phenyl benzimidazole-5-carboxylic acid (Example
 35 231),
           2-\{4-[2-(4-chlorophenyl)-5-dimethylcarbamoylbenzyloxy]phenyl\}-1-
         cyclohexylbenzimidazole-5-carboxylic acid (Example 232),
```

```
2-\frac{4-[4-(4-chlorophenyl)-2-methyl-5-pyrimidinyl}{methoxy]phenyl}
    1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride
    (Example 233),
    2-\frac{4-[\frac{2-(4-\text{chlorophenyl})-3-\text{pyridyl}}{\text{methoxy}}]}{-1-}
 5 cyclohexylbenzimidazole-5-carboxylic acid dihydrochloride
    (Example 234),
    2-\frac{4-[3-(4-\text{chlorophenyl})-2-\text{pyridyl}}{\text{methoxy}}
   cyclohexylbenzimidazole-5-carboxylic acid (Example 235),
    2-\d-[2-(3-chlorophenyl)-4-methylamino-1,3,5-triazin-6-
10 yloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
   trifluoroacetate (Example 236),
    2-\frac{4-[2-(4-\text{chlorophenyl})-4-(5-\text{tetrazolyl})\text{benzyloxy}]\text{phenyl}}{-1-}
   cyclohexylbenzimidazole-5-carboxylic acid (Example 237),
    2-[4-(4-benzyloxy-6-pyrimidinyloxy)phenyl]-1-
15 cyclohexylbenzimidazole-5-carboxylic acid (Example 238),
    1-cyclohexyl-2-{4-[4-(4-pyridylmethoxy)-6-pyrimidinyloxy]phenyl}-
   benzimidazole-5-carboxylic acid (Example 239),
    2-4-[4-(3-chlorophenyl)-6-pyrimidinyloxy]phenyl-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 240),
methyl 2-\frac{1}{4}-[2-(4-chlorophenyl)-5-methoxybenzyloxy]phenyl\frac{1}{2}-1-
   cyclohexylbenzimidazole-5-carboxylate (Example 241),
    2-\frac{4-[2-(4-chlorophenyl)-5-methoxybenzyloxy]phenyl\frac{1-cyclohexyl-}
   benzimidazole-5-carboxylic acid hydrochloride (Example 242),
    ethyl 2-{4-[3-(4-chlorophenyl)pyridin-2-ylmethoxy]phenyl}-1-
25 cyclohexylbenzimidazole-5-carboxylate (Example 243),
    methyl 2-[4-(2-bromo-5-tert-butoxycarbonylbenzyloxy)phenyl]-1-
   cyclohexylbenzimidazole-5-carboxylate (Example 244),
    methyl 2-{4-[5-tert-butoxycarbonyl-2-(4-chlorophenyl)benzyloxy]-
   phenyl \-1-cyclohexylbenzimidazole-5-carboxylate (Example 245),
   methyl 2-{4-[5-carboxy-2-(4-chlorophenyl)benzyloxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylate hydrochloride (Example 246),
    methyl 2-\frac{1}{4}-[2-(4-\text{chlorophenyl})-5-\text{methylcarbamoylbenzyloxy}]-
   phenyl}-1-cyclohexylbenzimidazole-5-carboxylate (Example 247),
    2-\(\frac{4-[2-(4-chlorophenyl)-5-methylcarbamoylbenzyloxy]phenyl\}-1-
35 cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example
   248),
    2-\frac{1}{4}-\frac{3-(\text{tert-butylsulfamoyl})-6-(4-\text{chlorophenyl})}{6-(4-\text{chlorophenyl})}
   phenyl \rangle -1-cyclohexylbenzimidazole -5-carboxylic acid (Example 249),
```

```
2-{4-[2-(4-chlorophenyl)-5-sulfamoylbenzyloxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid trifluoroacetate
   (Example 250),
    2-(4-benzyloxycyclohexyl)-1-cyclohexylbenzimidazole-5-carboxylic
5 acid hydrochloride (Example 251),
    2-[2-(2-biphenylyloxymethyl)-5-thienyl]-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 252),
    2-[2-(2-biphenylyloxymethyl)-5-furyl]-1-cyclohexylbenzimidazole-
   5-carboxylic acid (Example 253),
10 1-cyclohexyl-2-\{4-[\{4-(4-fluorophenyl)-2-hydroxymethyl-5-
   thiazolyl methoxy] phenyl benzimidazole-5-carboxylic acid (Example
   254),
    1-\text{cyclohexyl}-2-\left\{4-\left[\left(4-\text{(}4-\text{carboxyphenyl}\right)-2-\text{methyl}-5-\text{thiazolyl}\right\}-\right\}
   methoxy]phenyl benzimidazole-5-carboxylic acid hydrochloride
15 (Example 255),
    1-cyclohexyl-2-{2-fluoro-4-[4-fluoro-2-(3-fluorobenzoyl)-
   benzyloxy]phenyl benzimidazole-5-carboxylic acid (Example 256),
    2-\{4-[2-(4-chlorophenyl)-5-methoxybenzyloxy] phenyl\}-1-
   cyclohexylbenzimidazole-5-sulfonic acid (Example 257),
20 2-\{4-[2-(4-chlorophenyl)-5-methoxybenzyloxy]phenyl\-3-
   cyclohexylbenzimidazole-4-carboxylic acid (Example 258),
    1-cyclohexyl-2-{4-[3-dimethylcarbamoyl-5-(4-pyridylmethoxy)-
   phenoxy]phenyl benzimidazole-5-carboxylic acid dihydrochloride
    (Example 259),
25 1-cyclohexyl-2-\{4-[3-carboxy-5-(4-pyridylmethoxy) phenoxy]-
   phenyl benzimidazole-5-carboxylic acid dihydrochloride (Example
   260),
    2-\{4-[2-(4-\text{chlorophenyl})-5-\text{methoxybenzyloxy}] \text{ phenyl}\}-1-
   cyclohexylbenzimidazole-4-carboxylic acid (Example 261),
2-\{4-[3-carbamoyl-6-(4-chlorophenyl)benzyloxy]phenyl\}-1-
   cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example
   262),
    2-\frac{4-[4-(4-carboxyphenyl)-3-pyridyl)}{methoxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 263),
2-\left\{4-\left[2-\left(4-\text{chlorophenyl}\right)-5-\text{methoxybenzyloxy}\right]\right\}-1-\left(4-\frac{1}{2}\right\}
   tetrahydrothiopyranyl)benzimidazole-5-carboxylic acid (Example
   264),
```

- 2-{4-[2-(4-chlorophenyl)-5-dimethylcarbamoylbenzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 265),
- 1-cyclohexyl-2-{4-[3-dimethylcarbamoyl-6-(4-
- 5 trifluoromethylphenyl)benzyloxy]phenyl benzimidazole-5-carboxylic acid hydrochloride (Example 266),
 - 1-cyclohexyl-2-{4-[3-dimethylcarbamoyl-6-(4-methylthiophenyl)-benzyloxy]phenyl}benzimidazole-5-carboxylic acid hydrochloride (Example 267),
- 10 2-{4-[2-(4-chlorophenyl)-5-methylcarbamoylbenzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 268),
- 2-\delta-[2-(4-chlorophenyl)-5-dimethylcarbamoylbenzyloxy]-2-fluorophenyl\delta-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 269),
 - 2-{4-[3-carbamoyl-6-(4-chlorophenyl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 270),
- 2-{4-[3-dimethylcarbamoyl-6-(4-methanesulfonylphenyl)benzyloxy]20 phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride
 (Example 271),
 - 2-{4-[3-dimethylcarbamoyl-6-(3-pyridyl)benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid dihydrochloride (Example 272),
- 25 2-{4-[3-dimethylcarbamoyl-6-(4-dimethylcarbamoylphenyl)-benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid (Example 273),

30 274),

- $2-\frac{4-[2-(4-chlorophenyl)-5-methoxybenzyloxy]phenyl}{-1-(1-oxo-4-tetrahydrothiopyranyl)benzimidazole-5-carboxylic acid (Example$
- 2-{4-[2-(4-chlorophenyl)-5-methoxybenzyloxy]phenyl}-1-(1,1-dioxo-4-tetrahydrothiopyranyl)benzimidazole-5-carboxylic acid (Example 275),
- 2-\delta-[2-(4-chlorophenyl)-5-methoxybenzyloxy]-2-fluorophenyl\delta-135 (4-tetrahydrothiopyranyl)benzimidazole-5-carboxylic acid (Example 276),

```
2-\{4-[2-(4-chlorophenyl)-5-methoxybenzyloxy]-2-fluorophenyl\}-1-
        (1-oxo-4-tetrahydrothiopyranyl)benzimidazole-5-carboxylic acid
         (Example 277),
          2-\{4-[2-(4-chlorophenyl)-5-methoxybenzyloxy]-2-fluorophenyl\}-1-
 5 (1,1-dioxo-4-tetrahydrothiopyranyl)benzimidazole-5-carboxylic
        acid (Example 278),
          2-4-[2-(4-chlorophenyl)-5-dimethylsulfamoylbenzyloxy]phenyl}-1-
        cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example
        279),
2-4-[2-(4-chlorophenyl)-5-methanesulfonylbenzyloxy]phenyl}-1-
        cyclohexylbenzimidazole-5-carboxylic acid (Example 280),
          2-{4-[2-(4-chlorophenyl)-5-methylsulfamoylbenzyloxy]phenyl}-1-
        cyclohexylbenzimidazole-5-carboxylic acid (Example 281),
          2-{4-[2-(4-chlorophenyl)-5-dimethylaminobenzyloxy]phenyl}-1-
15 cyclohexylbenzimidazole-5-carboxylic acid (Example 282),
          2-\{4-[2-(4-chlorophenyl)-5-methanesulfonylaminobenzyloxy]phenyl\}-
        1-cyclohexylbenzimidazole-5-carboxylic acid (Example 283),
           2-{4-[2-(4-chlorophenyl)-5-diethylcarbamoylbenzyloxy]-2-
        fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
20 (Example 284),
           2-{4-[2-(4-chlorophenyl)-5-isopropylcarbamoylbenzyloxy]-2-
         fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
         (Example 285),
           2-{4-[2-(4-chlorophenyl)-5-piperidinocarbonylbenzyloxy]-2-
25 fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
         (Example 286),
           2-4-[2-(4-chlorophenyl)-5-(1-pyrrolidinyl) carbonylbenzyloxy]-2-
         fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
         (Example 287),
2-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{
         fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
          (Example 288),
           2-\frac{4-[2-(4-\text{chlorophenyl})-5-(4-\text{hydroxypiperidino})-
         carbonylbenzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-
35 carboxylic acid (Example 289),
           2-\frac{4-[2-(4-chlorophenyl)-5-morpholinocarbonylbenzyloxy]-2-
         fluorophenyl \}-1-cyclohexylbenzimidazole-5-carboxylic acid
          (Example 290),
```

```
2-\frac{4-[2-(4-chlorophenyl)-5-thiomorpholinocarbonylbenzyloxy]-2-
   fluorophenyl \}-1-cyclohexylbenzimidazole-5-carboxylic acid
    (Example 291),
    2-{4-[3-(carboxymethylcarbamoyl)-6-(4-chlorophenyl)benzyloxy]-2-
 5 fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
    (Example 292),
    2-\frac{4-[2-4-(2-carboxyethyl)phenyl}{-5-chlorobenzyloxy}phenyl}{-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 293),
    2-{4-[3-chloro-6-(4-hydroxymethylphenyl)benzyloxy]phenyl}-1-
10 cyclohexylbenzimidazole-5-carboxylic acid (Example 294),
    2-{4-[3-chloro-6-(4-methoxymethylphenyl)benzyloxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 295),
    2-\frac{4-[2-(3-carboxyphenyl)-5-chlorobenzyloxylphenyl}{-1-}
   cyclohexylbenzimidazole-5-carboxylic acid (Example 296),
2-\frac{15}{4-[2-(4-\text{chlorophenyl})-5-\text{methylthiobenzyloxy}]}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 297),
    2-\frac{4-[2-(4-chlorophenyl)-5-methylsulfinylbenzyloxy]phenyl}{-1-}
   cyclohexylbenzimidazole-5-carboxylic acid (Example 298),
    2-\frac{4-[2-(4-chlorophenyl)-5-cyanobenzyloxy]phenyl\frac{1-cyclohexyl-}{2-1-cyclohexyl-}
20 benzimidazole-5-carboxylic acid (Example 299),
    2-{4-[bis(2-pyridyl)methoxy]phenyl}-1-cyclohexylbenzimidazole-5-
   carboxylic acid (Example 300),
    2-{4-[bis(4-dimethylcarbamoylphenyl)methoxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 301),
25 2-\(\frac{4-\[\text{bis}(2-\text{thienyl})\text{methoxy}\]\text{phenyl}\\\ -1-\text{cyclohexylbenzimidazole-5-}\)
   carboxylic acid (Example 302),
    methyl 2-{4-[2-(4-chlorophenyl)-5-(dimethylcarbamoyl)benzyloxy]-
   2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylate (Example
   303),
sodium 2-\frac{4-[2-(4-\text{chlorophenyl})-5-(\text{dimethylcarbamoyl})\text{benzyloxy}]-
   2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylate (Example
   304),
    2-\frac{4-[5-carboxy-2-(4-chlorophenyl)benzyloxy]-2-fluorophenyl}{-1-}
   cyclohexylbenzimidazole-5-carboxylic acid (Example 305),
2-\frac{4-[2-(4-carboxyphenyl)-5-methoxybenzyloxy]phenyl}{-1-}
   cyclohexylbenzimidazole-5-carboxylic acid (Example 306),
    2-\d-[2-(4-carbamoylphenyl)-5-(dimethylcarbamoyl)benzyloxy]-
   phenyl \frac{1}{-1}-cyclohexylbenzimidazole-5-carboxylic acid (Example 307),
```

```
2-\frac{4-[5-amino-2-(4-chlorophenyl)benzyloxy]phenyl}{-1-}
   cyclohexylbenzimidazole-5-carboxylic acid (Example 308),
    2-\frac{4-[5-(4-chlorophenyl)-2-methoxybenzylsulfinyl]phenyl\frac{1-}{-1-}
   cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example
 5 309),
    2-{4-[5-(4-chlorophenyl)-2-methoxybenzylsulfonyl]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example
   310),
    2-\frac{4-[2-(4-chlorophenyl)-5-methoxybenzylthio]phenyl\frac{1-}
10 cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example
   311),
    2-\frac{4-[bis(4-carboxyphenyl)methoxy]-2-fluorophenyl\frac{1-}{-1-}
   cyclohexylbenzimidazole-5-carboxylic acid (Example 312),
    2-[4-(phenyl-3-pyridylmethoxy)-2-fluorophenyl]-1-
15 cyclohexylbenzimidazole-5-carboxylic acid (Example 313),
    methyl 2-\frac{1}{4}-[2-(4-\text{chlorophenyl})-5-(\text{methylcarbamoyl})\text{benzyloxy}]-2-
   fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylate (Example
   314),
    2-\{4-[5-chloro-2-(4-pyridyl)benzyloxy]phenyl\}-1-
20 cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example
   315),
    2-{4-[2-(4-chlorophenyl)-5-(benzylcarbamoyl)benzyloxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example
   316),
25 2-{4-[2-(4-chlorophenyl)-5-(cyclohexylmethylcarbamoyl)-
   benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
   hydrochloride (Example 317),
    2-{4-[2-(4-chlorophenyl)-5-(4-pyridylmethylcarbamoyl)-
   benzyloxy]phenyl \-1-cyclohexylbenzimidazole-5-carboxylic acid
30 dihydrochloride (Example 318),
    2-{4-[2-(4-chlorophenyl)-5-(N-benzyl-N-methylcarbamoyl)-
   benzyloxy|phenyl \}-1-cyclohexylbenzimidazole-5-carboxylic acid
   hydrochloride (Example 319),
   2-\frac{4-[5-dimethylaminocarbonyl-2-(4-pyridyl)benzyloxy]phenyl\frac{1-1-1}{1-1-1}
35 cyclohexylbenzimidazole-5-carboxylic acid dihydrochloride (Example
   320),
```

- 2-{4-[2-(4-chlorophenyl)-5-(4-methylpiperazin-1-ylcarbonyl)benzyloxylphenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid dihydrochloride (Example 321),
- $2-\{4-[2-(4-chlorophenyl)-5-\{N-(3-pyridylmethyl) carbamoyl\}-$
- 5 benzyloxy]phenyl \rangle -1-cyclohexylbenzimidazole-5-carboxylic acid
 dihydrochloride (Example 322),
 - $2-\{4-[2-(4-chlorophenyl)-5-\{N-(2-pyridylmethyl) carbamoyl\}-benzyloxy]$ phenyl $\{-1-cyclohexylbenzimidazole-5-carboxylic acid dihydrochloride (Example 323),$
- 2-{4-[2-(4-chlorophenyl)-5-(cyclohexylcarbamoyl)benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride
 (Example 324),
- 2-{4-[2-(4-chlorophenyl)-5-(2-pyridin-4-ylethylcarbamoyl)-benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid dihydrochloride (Example 325),
 - 2-\dagger{4-[(4-fluorophenyl)\dagger{4-(dimethylaminocarbonyl)phenyl\methoxy]-2-fluorophenyl\dagger{-1-cyclohexylbenzimidazole-5-carboxylic acid (Example 326),
- 2-{4-[(4-fluorophenyl)(4-carboxyphenyl)methoxy]-2-fluorophenyl}20 1-cyclohexylbenzimidazole-5-carboxylic acid (Example 327),
 - 2-{4-[2-(4-chlorophenyl)-5-(4-oxopiperidinocarbonyl)-benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 328),
- 2-{4-[2-(4-chlorophenyl)-5-hydroxybenzyloxy]phenyl}-125 cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 329),
 - 2-{4-[2-(4-chlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 330),
- 30 2-{4-[2-(4-chlorophenyl)-5-(N-isopropyl-N-methylcarbamoyl)benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
 hydrochloride (Example 331),
- 2-{4-[2-(4-chlorophenyl)-5-(phenylcarbamoyl)benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 332),
 - 2-{4-[2-(4-chlorophenyl)-5-(4-methoxypiperidinocarbonyl)-benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 333),

 $2-\frac{4-[2-(4-chlorophenyl)-5-(3-hydroxypropyloxy)benzyloxy]phenyl}{-}$

```
1-cyclohexylbenzimidazole-5-carboxylic acid (Example 334),
    2-\frac{4-[2-(4-chlorophenyl)-5-(2-hydroxyethoxy)benzyloxy]phenyl}{-1-}
   cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example
 5 335),
   methyl 2-[4-(2-bromo-5-nitrobenzyloxy)-2-fluorophenyl]-1-
   cyclohexylbenzimidazole-5-carboxylate (Example 336),
    methyl 2-[4-\{2-(4-\text{chlorophenyl})-5-\text{nitrobenzyloxy}\}-2-
   fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylate (Example
10 337),
    methyl 2-[4-\(\frac{5}{-\text{amino}}\)-2-(4-chlorophenyl)benzyloxy\\-2-
   fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylate (Example
   338),
    methyl 2-[4-(4-chlorophenyl)-5-(2-oxopyrrolidin-1-
15 yl)benzyloxy\-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-
   carboxylate (Example 339),
    2-[4-\{2-(4-\text{chlorophenyl})-5-(2-\text{oxopyrrolidin}-1-\text{yl})\text{benzyloxy}\}-2-
   fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid
   hydrochloride (Example 340),
20 2-4-[2-(4-chlorophenyl)-5-(4-methylpiperidin-1-
   ylcarbonyl)benzyloxy]phenyl \-1-cyclohexylbenzimidazole-5-
   carboxylic acid hydrochloride (Example 341),
    2-{4-[5-acetyl-2-(4-chlorophenyl)benzyloxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example
25 342),
    2-{4-[2-(4-chlorophenyl)-5-{(4-hydroxypiperidin-1-ylcarbonyl)-
   methoxy\benzyloxy]phenyl\-1-cyclohexylbenzimidazole-5-carboxylic
   acid (Example 343),
    2-\frac{4-[2-(4-chlorophenyl)-5-(2-methoxyethoxy)benzyloxy]phenyl}{-1-}
30 cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example
   344),
    2-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{2-(2-\text{methoxyethoxy})}{2-(2-\text{methoxyethoxy})}
   benzyloxy]phenyl \rangle -1-cyclohexylbenzimidazole -5-carboxylic acid
   hydrochloride (Example 345),
35 2-{4-[2-(4-chlorophenyl)-5-(isobutylcarbonyl)benzyloxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 346),
    2-\frac{1}{4}-[2-(4-\text{chlorophenyl})-5-(2-\text{methylthiazol}-4-\text{yl})\text{benzyloxy}]-
   phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid (Example 347),
```

```
2-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{
                  ylcarbonyl)benzyloxy]phenyl \-1-cyclohexylbenzimidazole-5-
                   carboxylic acid hydrochloride (Example 348),
                        2-\frac{4-[2-(4-chlorophenyl)-5-(3-methyl-1,2,4-oxadiazol-5-
  5 yl)benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
                   hydrochloride (Example 349),
                        2-{4-[2-(4-chlorophenyl)-4-(isopropylcarbamoyl)benzyloxy]phenyl}-
                   1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example
                   350),
2-{4-[2-(4-chlorophenyl)-4-(piperidinocarbonyl)benzyloxy]phenyl}-
                   1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example
                   351),
                         2-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{1}{(1-\text{hydroxy}-2-\text{methylpropan}-2-\frac{1}{(1-\text{hydroxy}-2-\text{methylpropan}-2-\frac{1}{(1-\text{hydroxy}-2-\text{methylpropan}-2-\frac{1}{(1-\text{hydroxy}-2-\text{methylpropan}-2-\frac{1}{(1-\text{hydroxy}-2-\text{methylpropan}-2-\frac{1}{(1-\text{hydroxy}-2-\text{methylpropan}-2-\frac{1}{(1-\text{hydroxy}-2-\text{methylpropan}-2-\frac{1}{(1-\text{hydroxy}-2-\text{methylpropan}-2-\frac{1}{(1-\text{hydroxy}-2-\text{methylpropan}-2-\frac{1}{(1-\text{hydroxy}-2-\text{methylpropan}-2-\frac{1}{(1-\text{hydroxy}-2-\text{methylpropan}-2-\frac{1}{(1-\text{hydroxy}-2-\text{methylpropan}-2-\frac{1}{(1-\text{hydroxy}-2-\text{methylpropan}-2-\frac{1}{(1-\text{hydroxy}-2-\text{methylpropan}-2-\frac{1}{(1-\text{hydroxy}-2-\text{methylpropan}-2-\frac{1}{(1-\text{hydroxy}-2-\text{methylpropan}-2-\frac{1}{(1-\text{hydroxy}-2-\text{methylpropan}-2-\frac{1}{(1-\text{hydroxy}-2-\text{methylpropan}-2-\frac{1}{(1-\text{hydroxy}-2-\text{methylpropan}-2-\frac{1}{(1-\text{hydroxy}-2-\text{methylpropan}-2-\frac{1}{(1-\text{hydroxy}-2-\text{methylpropan}-2-\frac{1}{(1-\text{hydroxy}-2-\text{methylpropan}-2-\frac{1}{(1-\text{hydroxy}-2-\text{methylpropan}-2-\frac{1}{(1-\text{hydroxy}-2-\text{methylpropan}-2-\frac{1}{(1-\text{hydroxy}-2-\text{methylpropan}-2-\frac{1}{(1-\text{hydroxy}-2-\text{methylpropan}-2-\frac{1}{(1-\text{hydroxy}-2-\text{methylpropan}-2-\frac{1}{(1-\text{hydroxy}-2-\text{methylpropan}-2-\frac{1}{(1-\text{hydroxy}-2-\text{methylpropan}-2-\frac{1}{(1-\text{hydroxy}-2-\text{methylpropan}-2-\frac{1}{(1-\text{hydroxy}-2-\text{methylpropan}-2-\frac{1}{(1-\text{hydroxy}-2-\text{methylpropan}-2-\frac{1}{(1-\text{hydroxy}-2-\text{methylpropan}-2-\frac{1}{(1-\text{hydroxy}-2-\text{methylpropan}-2-\frac{1}{(1-\text{hydroxy}-2-\frac{1}{(1-\text{hydroxy}-2-\frac{1}{(1-\text{hydroxy}-2-\frac{1}{(1-\text{hydroxy}-2-\frac{1}{(1-\text{hydroxy}-2-\frac{1}{(1-\text{hydroxy}-2-\frac{1}{(1-\text{hydroxy}-2-\frac{1}{(1-\text{hydroxy}-2-\frac{1}{(1-\text{hydroxy}-2-\frac{1}{(1-\text{hydroxy}-2-\frac{1}{(1-\text{hydroxy}-2-\frac{1}{(1-\text{hydroxy}-2-\frac{1}{(1-\text{hydroxy}-2-\frac{1}{(1-\text{hydroxy}-2-\frac{1}{(1-\text{hydroxy}-2-\frac{1}{(1-\text{hydroxy}-2-\frac{1}{(1-\text{hydroxy}-2-\frac{1}{(1-\text{hydroxy}-2-\frac{1}{(1-\text{hydroxy}-2-\frac{1}{(1-\text{hydroxy}-2-\frac{1}{(1-\text{hydroxy}-2-\frac{1}{(1-\text{hydroxy}-2-\frac{1}{(1-\text{hydroxy}-2-\frac{1}{(1-\text{hydroxy}-2-\frac{1}{(1-\text{hydroxy}-2-\frac{1}{(1-\text{hydroxy}-2-\frac{1}{(1-\text{hydroxy}-2-\frac{1}{(1-\text{hydroxy}-2-\frac{1}{(1-\text{hydroxy}-2-\frac{1}{(1-\text{hydroxy}-2-\frac{1}{(1-\text{hydroxy}-2-\frac{1}{(1-\text{hydroxy}-2-\frac{1}{(1-\text{hydro
                   vl)carbamovl{benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-
15 carboxylic acid hydrochloride (Example 352),
                         2-\frac{1}{4}-\frac{1}{2}-\frac{4-\text{chlorophenyl}}{5-\frac{1}{4}-\frac{4-\text{dimethyl}}{2-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-
                   yl)benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
                   dihydrochloride (Example 353),
                         2-\frac{4-[2-(4-chlorophenyl)-4-(4-hydroxypiperidin-1-
20 vlcarbonyl)benzyloxy]phenyl\-1-cyclohexylbenzimidazole-5-
                    carboxylic acid hydrochloride (Example 354),
                         2-\{4-[2-(4-chlorophenyl)-4-\{(2-hydroxyethyl)carbamoyl\}-
                   benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
                   hydrochloride (Example 355),
25 2-\frac{4-[2-(4-\text{chlorophenyl})-4-{(4-\text{pyridylmethyl}) carbamoyl}}{-}
                   benzyloxylphenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
                      (Example 356),
                         2-{4-[2-(4-chlorophenyl)-4-(dimethylcarbamoyl)benzyloxy]phenyl}-
                    1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example
30 357),
                         2-\frac{4-[5-(2-aminothiazol-4-yl)-2-(4-chlorophenyl)benzyloxy]-
                    phenyl \{-1-cyclohexylbenzimidazole-5-carboxylic acid
                    dihydrochloride (Example 358),
                          2-4-[2-(4-chlorophenyl)-5-(4-hydroxypiperidin-1-
```

35 ylsulfonyl)benzyloxylphenyl}-1-cyclohexylbenzimidazole-5-

carboxylic acid hydrochloride (Example 359),

- 2-{4-[5-(dimethylcarbamoyl)-2-(4-fluorophenyl)benzyloxy]phenyl}1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 360),
- 2-{4-[5-(dimethylcarbamoyl)-2-(3-fluorophenyl)benzyloxy]phenyl}5 1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 361),
 - $2-\frac{4-[2-(5-\text{chlorothiophen}-2-y1)-5-(\text{dimethylcarbamoyl})\text{benzyloxy}]-phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 362),$
- 2-{4-[2-bromo-5-(5-methyloxazol-2-yl)benzyloxy]phenyl}-1cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example
 363),
- 2-{4-[2-bromo-5-(5-methylthiazol-2-yl)benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 364),
 - 2-{4-[2-(4-chlorophenyl)-5-(5-methyloxazol-2-yl)benzyloxy]-phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 365),
 - $2-\frac{4-[2-(4-\text{chlorophenyl})-5-(5-\text{methylthiazol}-2-\text{yl})\text{benzyloxy}]-$
- - 2-{4-[2-(4-chlorophenyl)-5-tetrazol-5-ylbenzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 367),
- 25 2-{4-[5-chloro-2-(4-cyanophenyl)benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 368),
- 2-{4-[5-chloro-2-(4-tetrazol-5-ylphenyl)benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 30 369),
 - 2-\d-[2-(4-chlorophenyl)-5-\d2-(4-hydroxypiperidin-1-yl)ethoxy\benzyloxy]phenyl\d2-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 370),
 - 2-{4-[2-(4-chlorophenyl)-5-(2-oxopiperidin-1-yl)benzyloxy]-2-
- 35 fluorophenyl \rangle -1-cyclohexylbenzimidazole-5-carboxylic acid
 hydrochloride (Example 371),

- 2-{4-[3-(4-chlorophenyl)-5-(dimethylcarbamoyl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 372),
- $2-\frac{4-[2-(4-\text{chlorophenyl})-5-(N-\text{hydroxyamidino}) \text{ benzyloxy}]-2-$
- 5 fluorophenyl \(\frac{1}{-1} \text{cyclohexylbenzimidazole-5-carboxylic acid} \)
 dihydrochloride (Example 373),
 - 2-{4-[2-(4-chlorophenyl)-5-(2,5-dihydro-5-oxo-4H-1,2,4-oxadiazol-3-yl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 374),
- 2-\d-[2-(4-chlorophenyl)-5-(2-oxo-3H-1,2,3,5-oxathiadiazol-4-yl)benzyloxy]-2-fluorophenyl\d-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 375),
 - $2-\frac{4-[2-(4-\text{chlorophenyl})-5-(2,5-\text{dihydro}-5-\text{oxo}-4H-1,2,4-\text{thiadiazol}-3-yl)}{-1-}$
- cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 376),
 - 2-{4-[2-(4-chlorophenyl)-5-(cyclopropylcarbamoyl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 377),
- 20 2-\d-[2-(4-chlorophenyl)-5-(cyclobutylcarbamoyl)benzyloxy]-2-fluorophenyl\delta-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 378),
 - 2-{4-[2-(4-chlorophenyl)-5-(tert-butylcarbamoyl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
- 25 hydrochloride (Example 379),
 - 2-{4-[2-(4-chlorophenyl)-5-(isobutylcarbamoyl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 380),
 - $2-\frac{4-[2-(4-chlorophenyl)-5-{(1-hydroxypropan-2-yl)carbamoyl}-$
- benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 381),
 - $2-\frac{4-[2-(4-\text{chlorophenyl})-5-(\text{methoxycarbamoyl})\text{benzyloxy}]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 382),$

- 2-{4-[2-(4-chlorophenyl)-5-(N-ethyl-N-methylcarbamoyl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 384),
- 2-4-[2-(4-chlorophenyl)-5-(N-methyl-N-propylcarbamoyl)-
- 5 benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 385),
 - 2-{4-[2-(4-chlorophenyl)-5-(N-isopropyl-N-methylcarbamoyl)-benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 386),
- 2-\delta-[2-(4-chlorophenyl)-5-(2,6-dimethylpiperidin-1-ylcarbonyl)-benzyloxy]-2-fluorophenyl\delta-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 387),
- 2-{4-[5-(butylcarbamoyl)-2-(4-chlorophenyl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 388),
 - 2-{4-[2-(4-chlorophenyl)-5-(propylcarbamoyl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 389),
 - $2-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{$
- 20 fluorophenyl \}-1-cyclohexylbenzimidazole-5-carboxylic acid
 hydrochloride (Example 390),
 - 2-{4-[2-(4-chlorophenyl)-5-{ (dimethylcarbamoyl) amino benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 391),
- 25 2-{4-[2-(4-chlorophenyl)-5-{(morpholinocarbonyl)amino}benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 392),
- 2-{4-[2-(4-chlorophenyl)-5-ureidobenzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 30 393),
 - 2-{4-[2-(4-chlorophenyl)-5-{(ethylcarbamoyl)amino}benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 394),
- 2-{4-[2-(4-chlorophenyl)-5-{(isopropylcarbamoyl)amino}benzyloxy]35 2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
 hydrochloride (Example 395),

```
2-{4-[2-(3,4-difluorophenyl)-5-(isopropylcarbamoyl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid (Example 396),
```

- $2-\frac{4}{2}$ [2-(2,4-difluorophenyl)-5-(isopropylcarbamoyl)benzyloxy]-2-
- fluorophenyl \}-1-cyclohexylbenzimidazole-5-carboxylic acid
 hydrochloride (Example 397),
 - 2-{4-[2-(3,5-dichlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 398),
- 2-{4-[2-(3-chloro-4-fluorophenyl)-5-(isopropylcarbamoyl)-benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 399),
 - 2-{4-[2-(3,4-dichlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
- 15 hydrochloride (Example 400),
 - 2-{4-[2-(4-chloro-2-fluorophenyl)-5-(isopropylcarbamoyl)-benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 401),
 - 2-{4-[2-(4-chloro-2-fluorophenyl)-5-(pyrrolidin-1-ylcarbonyl)-
- 20 benzyloxy]-2-fluorophenyl \(\frac{1}{2} 1 \text{cyclohexylbenzimidazole} 5 \text{carboxylic} \)
 acid hydrochloride (Example 402),
 - 2-{4-[2-(4-chloro-3-fluorophenyl)-5-(pyrrolidin-1-ylcarbonyl)-benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 403),
- 25 2-{4-[2-(4-chloro-3-fluorophenyl)-5-(isopropylcarbamoyl)-benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 404),
- 2-{4-[2-{4-(methylthio)phenyl}-5-(2-oxopyrrolidin-1-yl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 405),
 - $2-\frac{4-[2-4-(methylthio)phenyl}-5-(isopropylcarbamoyl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 406),$
- 2-\d-[4-chloro-2-(4-chlorophenyl)-5-(1,1-dioxoisothiazolidin-2yl)benzyloxy]-2-fluorophenyl\delta-1-cyclohexylbenzimidazole-5carboxylic acid hydrochloride (Example 407),

```
CA 02423800 2003-03-25
                      2-{4-[4-chloro-2-(4-chlorophenyl)-5-(2-oxopyrrolidin-1-
                  yl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-
                  carboxylic acid hydrochloride (Example 408),
                      2-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{
    5 fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
                 hydrochloride (Example 409),
                      2-\frac{1}{4} [2-(4-chlorophenyl)-5-(dimethylcarbamoyl)benzyloxy]-2-
                 fluorophenyl}-1-cyclopentylbenzimidazole-5-carboxylic acid
                 hydrochloride (Example 410),
10 2-\frac{1}{4}-[2-(4-\text{chlorophenyl})-5-(4-\text{hydroxypiperidin}-1-\text{ylcarbonyl})-
                benzyloxy]-2-fluorophenyl}-1-cyclopentylbenzimidazole-5-carboxylic
                 acid hydrochloride (Example 411),
                     2-\frac{4-[2-(4-chlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]-2-
                 fluorophenyl \}-1-cyclopentylbenzimidazole-5-carboxylic acid
15 hydrochloride (Example 412),
                      2-4-[2-(4-chlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]phenyl}-
                 1-cyclopentylbenzimidazole-5-carboxylic acid hydrochloride
                   (Example 413),
                    2-{4-[2-(4-chlorophenyl)-5-(dimethylcarbamoyl)benzyloxy]phenyl}-
20 1-cyclopentylbenzimidazole-5-carboxylic acid hydrochloride
                  (Example 414),
                    2-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{
                 ylcarbonyl)benzyloxy]phenyl \rangle -1-cyclopentylbenzimidazole-5-
                 carboxylic acid hydrochloride (Example 415),
25 2-\frac{4}{2} [2-(4-chlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]phenyl
                 1-(tetrahydrothiopyran-4-yl)benzimidazole-5-carboxylic acid
               hydrochloride (Example 416),
                    2-\frac{4-[2-(4-chlorophenyl)-5-(pyrrolidin-1-ylcarbonyl)benzyloxy]-
```

- phenyl \-1-(tetrahydrothiopyran-4-yl) benzimidazole-5-carboxylic 30 acid hydrochloride (Example 417),
 - $2-\frac{1}{4}-[2-(4-\text{chlorophenyl})-5-(\text{isopropylcarbamoyl}) \text{benzyloxy}]-2$ fluorophenyl \\ -1-(tetrahydrothiopyran-4-yl)benzimidazole-5carboxylic acid hydrochloride (Example 418),
 - 2-4-[2-(4-chlorophenyl)-5-(2-oxopyrrolidin-1-yl)benzyloxy]-2-
- 35 fluorophenyl }-1-(tetrahydrothiopyran-4-yl)benzimidazole-5carboxylic acid hydrochloride (Example 419),

```
2-\{4-[2-(4-chlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]-2-fluorophenyl\}-1-piperidinobenzimidazole-5-carboxylic acid hydrochloride (Example 420),
```

- 2-\delta-[2-(4-chlorophenyl)-5-(pyrrolidin-1-ylcarbonyl)benzyloxy]-25 fluorophenyl\delta-1-piperidinobenzimidazole-5-carboxylic acid (Example 421),
 - 2-{4-[2-(4-chlorophenyl)-5-(2-imidazolin-2-yl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid dihydrochloride (Example 422),
- 10 2-{4-[2-(4-chlorophenyl)-5-(2-oxooxazolidin-3-yl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 423),
 - $2-\left\{4-\left[2-\left(4-\text{chlorophenyl}\right)-5-\left(2-\text{oxoimidazolidin}-1-\text{yl}\right)\text{benzyloxy}\right]-2-\left[2-\left(4-\text{chlorophenyl}\right)-1-\text{cyclohexylbenzimidazole}-5-\text{carboxylic acid}\right]$
- 15 hydrochloride (Example 424),
 - $2-\{4-[2-(4-chlorophenyl)-5-(2-oxazolin-2-ylamino)benzyloxy]-2-fluorophenyl\}-1-cyclohexylbenzimidazole-5-carboxylic acid dihydrochloride (Example 425),$
 - $2-\frac{4-[2-[(dimethylcarbamoyl)methoxy]methyl]-4-(4-$
- fluorophenyl)thiazol-5-yl\methoxy]phenyl\-1cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example
 426),
- 2-{4-[{4-(4-fluorophenyl)-2-(4-hydroxypiperidin-1-ylmethyl)thiazol-5-yl}methoxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid dihydrochloride (Example 427),
 - 2-{4-[{4-(4-fluorophenyl)-2-[(carbamoylmethoxy)methyl]thiazol-5-yl}methoxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 428),
 - 2-4-4-4-4-4-4 (4-fluorophenyl)-2-(methylcarbamoyl) thiazol-5-
- 30 yl/methoxy]-2-fluorophenyl/-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 429),
 - 2-{4-[4-(4-fluorophenyl)-2-{(2-hydroxyethyl)carbamoyl}thiazol-5-yl}methoxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 430),
- 2-\langle 4-[\langle 2-(4-fluorophenyl)-5-(dimethylcarbamoyl) thiophen-3yl\methoxy]-2-fluorophenyl\rangle-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 431),

```
2-\frac{4-\sqrt{2-(4-fluorophenyl)}-5-(isopropylcarbamoyl)}{thiophen-3-}
   vl\methoxy]-2-fluorophenyl\-1-cyclohexylbenzimidazole-5-carboxylic
   acid hydrochloride (Example 432),
    2-\frac{4-[4-(4-fluorophenyl)-5-(4-hydroxypiperidin-1-
5 ylcarbonyl)thiophen-3-yl{methoxy]-2-fluorophenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example
   433),
    2-{4-[2-(4-chlorophenyl)-5-(dimethylcarbamoyl)benzyloxy]-2-
   fluorophenyl}-1-cyclohexyl-5-tetrazol-5-ylbenzimidazole (Example
10 434),
    2-\frac{4-(2-(4-carboxyphenyl)-5-chlorobenzyloxy]-2-fluorophenyl}{-1-
   cyclohexyl-5-tetrazol-5-ylbenzimidazole hydrochloride (Example
   435),
    2-{4-[2-(4-chlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]-2-
15 fluorophenyl}-1-cyclohexyl-5-(2,5-dihydro-5-oxo-4H-1,2,4-
   oxadiazol-3-yl)benzimidazole hydrochloride (Example 436),
    2-{4-[5-carboxy-2-(4-chlorophenyl)benzyloxy]-2-fluorophenyl}-5-
   cyano-1-cyclohexylbenzimidazole (Example 437),
    2-{4-[2-(4-chlorophenyl)-5-(dimethylcarbamoyl)benzyloxy]-2-
20 fluorophenyl \ -5-cyano-1-cyclohexylbenzimidazole (Example 438),
    2-{4-[{N-(4-dimethylcarbamoyl)-N-(4-fluorophenyl)amino}-
   methyl]phenyl \-1-cyclohexylbenzimidazole-5-carboxylic acid
   (Example 439),
    2-{5-[bis(3-fluorophenyl)methyl]-2-fluoro-4-hydroxyphenyl}-1-
25 cyclohexylbenzimidazole-5-carboxylic acid (Example 440),
    2-{3-[bis(3-fluorophenyl)methyl]-2-fluoro-4-hydroxyphenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid (Example 441),
    2-{4-[(3-dimethylcarbamoylphenyl)(4-fluorophenyl)methoxy]-2-
   fluorophenyl \}-1-cyclohexylbenzimidazole-5-carboxylic acid
30 hydrochloride (Example 442),
    2-\{4-[\{3-(4-hydroxypiperidyl-1-ylcarbonyl)phenyl\}(4-
   fluorophenyl)methoxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-
   carboxylic acid hydrochloride (Example 443),
    1-\{[2-\{4-([4-(4-fluorophenyl)-2-methylthiazol-5-
35 yl]methoxy)phenyl-1-cyclohexylbenzimidazol-5-yl]carbonyl-\beta-D-
   glucuronic acid (Example 444),
```

```
cyclohexylbenzimidazol-5-yl]carbonyl\beta-\beta-D-glucuronic acid (Example
   445),
    2-\frac{4}{(2-(4-\text{chlorophenyl})-5-(1,1-\text{dioxoisothiazolidin}-2-)}
5 yl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-
   carboxylic acid hydrochloride (Example 446),
    3-{[4-(5-aminosulfonyl-1-cyclohexylbenzimidazol-2-yl)-3-
   fluorophenoxy]methyl}-4-(4-chlorophenyl)-N-isopropylbenzamide
   (Example 447),
2-[4-{2-(4-chlorophenyl)-6-(isopropylaminocarbonyl)benzyloxy}-2-
   fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid
   hydrochloride (Example 448),
    2-[4-{2-(4-chlorophenyl)-4-fluoro-5-(1,1-dioxoisothiazolidin-2-
   yl)benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-
15 carboxylic acid hydrochloride (Example 449),
   2-[4-(2-(4-chlorophenyl)-5-(isopropylaminocarbonyl)benzyloxy}-2-
   fluorophenyl]-1-cyclohexyl-4-methoxybenzimidazole-5-carboxylic
   acid hydrochloride (Example 450),
    2-[4-{2-(4-chlorophenyl)-5-(N-isopropylcarbonyl-N-
20 methylamino)benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-
   5-carboxylic acid hydrochloride (Example 451),
   2-[4-(2-(4-chlorophenyl)-5-(isopropylcarbonylamino)benzyloxy}-2-
   fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid
   hydrochloride (Example 452),
25 2-[3-{[4-(4-fluorophenyl)-2-methylthiazol-5-yl]methyl}-4-
   hydroxyphenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid
   (Example 453),
   2-[4-{2-(4-chlorophenyl)-4-fluoro-5-(2-oxopyrrolidin-1-
   yl)benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-
30 carboxylic acid hydrochloride (Example 454),
   2-[4-{2-(4-chlorophenyl)-5-(methylsulfonylamino)benzyloxy}-2-
   fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid
   hydrochloride (Example 455),
   2-[4-{2-(4-chlorophenyl)}-5-[N-methyl-N-
35 (methylsulfonyl)amino]benzyloxy}-2-fluorophenyl]-1-
   cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example
   456),
```

```
2-[4-{[3-(4-chlorophenyl)-6-(2-oxopyrrolidin-1-yl)pyridin-2-
   yl]methyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-
   carboxylic acid hydrochloride (Example 457),
   2-[4-{2-(4-chlorophenyl)-5-(acetylamino)benzyloxy}-2-
5 fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid
   hydrochloride (Example 458),
   2-[4-{2-(4-chlorophenyl)-5-(N-acetyl-N-ethylamino)benzyloxy}-2-
   fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid
   hydrochloride (Example 459),
2-[4-{2-(4-chlorophenyl)-5-(N-acetyl-N-propylamino)benzyloxy}-2-
   fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid
   hydrochloride (Example 460),
    2-[4-{2-(4-chlorophenyl)-5-[N-ethyl-N-(methylsulfonyl)amino]-
   benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic
15 acid hydrochloride (Example 461),
    2-[4-{2-(4-chlorophenyl)-5-[N-(methylsulfonyl)-N-
   propylamino]benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-
   5-carboxylic acid hydrochloride (Example 462),
    2-[4-{2-(4-chlorophenyl)-5-(N-acetyl-N-methylamino)benzyloxy}-2-
20 fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid
   hydrochloride (Example 463),
    2-[4-(2-(4-chlorophenyl)-5-[N-(ethylsulfonyl)-N-methylamino]-
   benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic
   acid hydrochloride (Example 464),
25 2-[4-(2-(4-chlorophenyl)-5-[N-ethyl-N-(ethylsulfonyl)amino]-
   benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic
   acid hydrochloride (Example 465),
    2-[4-{2-(4-chlorophenyl)-5-[N-(ethylcarbonyl)-N-methylamino]-
   benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic
30 acid hydrochloride (Example 466),
    2-[4-{2-(4-chlorophenyl)-5-[N-ethyl-N-(ethylcarbonyl)amino]-
   benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic
   acid hydrochloride (Example 467),
    2-[4-\{2-(4-chlorophenyl)-5-methoxybenzyloxy\}-2-fluorophenyl]-1-
35 cyclohexylbenzimidazole-5-carboxylic acid (Example 468),
    2-[4-{2-(4-chlorophenyl)-5-(N-acetyl-N-isopropylamino)-
   benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic
```

acid hydrochloride (Example 469),

- $\label{eq:continuous} $$ \{[2-\{4-[2-(4-chlorophenyl)-5-(2-oxopyrrolidin-1-yl)benzyloxy]-2-fluorophenyl\}-1-cyclohexylbenzoimidazol-5-yl]carbonyl}-\beta-D-glucuronic acid (Example 470),$
- methyl 2-{4-[2-(4-chlorophenyl)-5-methoxybenzyloxy]phenyl}-1-5 cyclohexylindole-5-carboxylate (Example 501),
 - 2-{4-[2-(4-chlorophenyl)-5-methoxybenzyloxy]phenyl}-1-cyclohexyl-1H-indole-5-carboxylic acid (Example 502),
 - 2-(4-benzyloxyphenyl)-1-cyclopentyl-1H-indole-5-carboxylic acid (Example 503),
- ethyl 2-(4-benzyloxyphenyl)-3-cyclohexylimidazo[1,2-a]pyridine-7-carboxylate (Example 601),
 - 2-(4-benzyloxyphenyl)-3-cyclohexylimidazo[1,2-a]pyridine-7-carboxylic acid (Example 602),
- 2-{4-[2-(4-chlorophenyl)-5-methoxybenzyloxy]phenyl}-3-cyclohexyl
 3H-imidazo[4,5-b]pyridine-6-carboxylic acid (Example 701),
 - 2-\langle4-[2-(4-chlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]phenyl\rangle-3-cyclohexyl-3H-imidazo[4,5-b]pyridine-6-carboxylic acid hydrochloride (Example 702), and
- 2-{4-[2-(4-chlorophenyl)-5-(pyrrolidin-1-ylcarbonyl)benzyloxy]20 phenyl}-3-cyclohexyl-3H-imidazo[4,5-b]pyridine-6-carboxylic acid
 hydrochloride (Example 703).
 - (62) The fused ring compound of the formula [I] or a pharmaceutically acceptable salt thereof, which is selected from the group consisting of
- 25 2-{4-[2-(4-chlorophenyl)-5-(4-oxopiperidinocarbonyl)-benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 328),
- 2-\d-[2-(4-chlorophenyl)-5-hydroxybenzyloxy]phenyl\dagger-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 30 329),
 - 2-{4-[2-(4-chlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 330),
 - 2-{4-[2-(4-chlorophenyl)-5-(N-isopropyl-N-methylcarbamoyl)-
- benzyloxy]phenyl\-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 331),

```
2-\frac{4-[2-(4-\text{chlorophenyl})-5-(\text{phenylcarbamoyl})\text{benzyloxy}]\text{phenyl}}{-1-}
              cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example
              332),
                  2-4-[2-(4-chlorophenyl)-5-(4-methoxypiperidinocarbonyl)-
   5 benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
             hydrochloride (Example 333),
                  2-\frac{4-[2-(4-chlorophenyl)-5-(3-hydroxypropyloxy)benzyloxy]phenyl}{-}
              1-cyclohexylbenzimidazole-5-carboxylic acid (Example 334),
                  2-\{4-[2-(4-chlorophenyl)-5-(2-hydroxyethoxy) benzyloxy] phenyl\}-1-
10 cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example
              335),
                 methyl 2-[4-(2-bromo-5-nitrobenzyloxy)-2-fluorophenyl]-1-
              cyclohexylbenzimidazole-5-carboxylate (Example 336),
                 methyl 2-[4-\{2-(4-\text{chlorophenyl})-5-\text{nitrobenzyloxy}\}-2-
15 fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylate (Example
              337),
                methyl 2-[4-{5-amino-2-(4-chlorophenyl)benzyloxy}-2-
              fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylate (Example)
              338),
           methyl 2-[4-]2-(4-\text{chlorophenyl})-5-(2-\text{oxopyrrolidin}-1-
              vl)benzyloxy\-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-
              carboxylate (Example 339),
                  2-[4-\{2-(4-\text{chlorophenyl})-5-(2-\text{oxopyrrolidin}-1-\text{yl})\text{benzyloxy}\}-2-
              fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid
25 hydrochloride (Example 340),
                  2-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{
              ylcarbonyl)benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-
              carboxylic acid hydrochloride (Example 341),
                  2-\{4-[5-acetyl-2-(4-chlorophenyl)benzyloxy]phenyl\}-1-
30 cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example
              342),
                  2-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-\text{hydroxypiperidin-1-ylcarbonyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-\frac{4-[2-(4-\text{chlorophenyl})-5-[2-(4-\text{chlorophenyl})-5-[2-(4-\text{chlorophenyl})-5-[2-(4-\text{chlorophenyl})-5-[2-(4-\text{chlorophenyl})-5-[2-(4-\text{chlorophenyl})-5-[2-(4-\text{chlorophenyl})-5-[2-(4-\text{chlorophenyl})-5-[2-(4-\text{chlorophenyl})-5-[2-(4-\text{chlorophenyl})-5-[2-(4-\text{chlorophenyl})-5-[2-(4-\text{chlorophenyl})-5-[2-(4-\text{chlorophenyl})-5-[2-(4-\text{chlorophenyl})-5-[2-(4-\text{chlorophenyl})-5-[2-(4-\text{chlorophenyl})-5-[2-(4-\text{chlorophenyl})-5-[2-(4-\text{chlorophenyl})-5-[2-(4-\text{chlorophenyl})-5-[2-(4-\text{chlorophenyl})-5-[2-(4-\text{chlorophenyl})-5-[2-(4-\text{chlorophenyl})-5-[2-(4-\text{chlorophenyl})-5-[2-(4-\text{chlorophenyl})-5-[2-(4-\text{chlorophenyl})-5-[2-(4-\text{chlorophenyl})-5-[2-(4-\text{chlorophenyl})-5-[2-(4-\text{chlorophenyl})-5-[2-(4-\text{chlorophenyl})-5-[2-(4-\text{chlorophenyl})-5-[2-(4-\text{chlorophenyl})-5-[2-(4
              methoxy\benzyloxy]phenyl\-1-cyclohexylbenzimidazole-5-carboxylic
```

2-\darkarray(4-[2-(4-chlorophenyl)-5-(2-methoxyethoxy)benzyloxy]phenyl\darkarray(-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example

acid (Example 343),

344),

```
2-\frac{4-[2-(4-\text{chlorophenyl})-5-\{2-(2-\text{methoxyethoxy}) \text{ ethoxy}\}-
        benzyloxy|phenyl \}-1-cyclohexylbenzimidazole-5-carboxylic acid
         hydrochloride (Example 345),
           2-4-[2-(4-chlorophenyl)-5-(isobutylcarbonyl)benzyloxy]phenyl}-1-
  5 cyclohexylbenzimidazole-5-carboxylic acid (Example 346),
           2-\frac{1}{4}-[2-(4-\text{chlorophenyl})-5-(2-\text{methylthiazol}-4-\text{yl})\text{benzyloxy}]-
        phenyl \-1-cyclohexylbenzimidazole-5-carboxylic acid (Example 347),
           2-\frac{4-(2-(4-\text{chlorophenyl})-5-(3,4-\text{dihydroxypiperidin}-1-
         ylcarbonyl)benzyloxylphenyl \-1-cyclohexylbenzimidazole-5-
10 carboxylic acid hydrochloride (Example 348),
           2-\frac{4-[2-(4-\text{chlorophenyl})-5-(3-\text{methyl}-1,2,4-\text{oxadiazol}-5-
         yl)benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
         hydrochloride (Example 349),
           2-\frac{4-[2-(4-\text{chlorophenyl})-4-(\text{isopropylcarbamoyl})\text{benzyloxy}]\text{phenyl}}{-}
15 1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example
         350),
           2-{4-[2-(4-chlorophenyl)-4-(piperidinocarbonyl)benzyloxy]phenyl}-
         1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example
         351),
       2-\frac{4-[2-(4-\text{chlorophenyl})-5-\{(1-\text{hydroxy}-2-\text{methylpropan}-2-
         yl)carbamoyl{benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-
         carboxylic acid hydrochloride (Example 352),
           2-\frac{4-[2-(4-\text{chlorophenyl})-5-(4,4-\text{dimethyl}-2-\text{oxazolin}-2-
        yl)benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
25 dihydrochloride (Example 353),
           2-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{
         vlcarbonvl)benzyloxy|phenyl \rangle -1-cyclohexylbenzimidazole-5-
         carboxylic acid hydrochloride (Example 354),
           2-\frac{4-[2-(4-\text{chlorophenyl})-4-\{(2-\text{hydroxyethyl}) \text{ carbamoyl}\}-
30 benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
        hydrochloride (Example 355),
          2-\frac{4-[2-(4-\text{chlorophenyl})-4-\{(4-\text{pyridylmethyl}) \text{ carbamoyl}\}}{-}
        benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
         (Example 356),
35 2-{4-[2-(4-chlorophenyl)-4-(dimethylcarbamoyl)benzyloxy]phenyl}-
         1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example
```

357),

- 2-\delta-[5-(2-aminothiazol-4-yl)-2-(4-chlorophenyl)benzyloxy]-phenyl\delta-1-cyclohexylbenzimidazole-5-carboxylic acid dihydrochloride (Example 358),
 - 2-{4-[2-(4-chlorophenyl)-5-(4-hydroxypiperidin-1-
- 5 ylsulfonyl)benzyloxy]phenyl \{ -1-cyclohexylbenzimidazole-5carboxylic acid hydrochloride (Example 359),
 - 2-{4-[5-(dimethylcarbamoyl)-2-(4-fluorophenyl)benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 360),
- 2-{4-[5-(dimethylcarbamoyl)-2-(3-fluorophenyl)benzyloxy]phenyl}1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 361),
- 2-{4-[2-(5-chlorothiophen-2-yl)-5-(dimethylcarbamoyl)benzyloxy]-phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 362),
 - 2-{4-[2-bromo-5-(5-methyloxazol-2-yl)benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 363),
- 2-{4-[2-bromo-5-(5-methylthiazol-2-yl)benzyloxy]phenyl}-1cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 364),
 - 2-{4-[2-(4-chlorophenyl)-5-(5-methyloxazol-2-yl)benzyloxy]-phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 365),
- 25 2-{4-[2-(4-chlorophenyl)-5-(5-methylthiazol-2-yl)benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride
 (Example 366),
- 2-{4-[2-(4-chlorophenyl)-5-tetrazol-5-ylbenzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 30 367),
 - 2-{4-[5-chloro-2-(4-cyanophenyl)benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 368),
- 2-{4-[5-chloro-2-(4-tetrazol-5-ylphenyl)benzyloxy]phenyl}-135 cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 369),

```
2-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{
                     yl) ethoxy{benzyloxy|phenyl}-1-cyclohexylbenzimidazole-5-carboxylic
                     acid hydrochloride (Example 370),
                           2-\frac{4-[2-(4-\text{chlorophenyl})-5-(2-\text{oxopiperidin}-1-\text{yl})\text{benzyloxy}]-2-
     5 fluorophenyl \-1-cyclohexylbenzimidazole-5-carboxylic acid
                     hydrochloride (Example 371),
                          2-{4-[3-(4-chlorophenyl)-5-(dimethylcarbamoyl)benzyloxy]-2-
                     fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
                     hydrochloride (Example 372),
2-4-[2-(4-chlorophenyl)-5-(N-hydroxyamidino)benzyloxy]-2-
                     fluorophenyl \}-1-cyclohexylbenzimidazole-5-carboxylic acid
                     dihydrochloride (Example 373),
                           2-4-[2-(4-chlorophenyl)-5-(2,5-dihydro-5-oxo-4H-1,2,4-oxadiazol-
                     3-yl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-
15 carboxylic acid hydrochloride (Example 374),
                           2-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{
                     yl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-
                     carboxylic acid hydrochloride (Example 375),
                           2-4-[2-(4-chlorophenyl)-5-(2,5-dihydro-5-oxo-4H-1,2,4-
20 thiadiazol-3-yl)benzyloxy]-2-fluorophenyl}-1-
                     cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example
                     376).
                          2-\left(4-\left(2-\left(4-\text{chlorophenyl}\right)-5-\left(\text{cyclopropylcarbamoyl}\right)\text{benzyloxy}\right]-2-
                     fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
25 hydrochloride (Example 377),
                           2-\frac{4-[2-(4-chlorophenyl)-5-(cyclobutylcarbamoyl)benzyloxy]-2-
                      fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
                     hydrochloride (Example 378),
                           2-\frac{4-[2-(4-\text{chlorophenyl})-5-(\text{tert-butylcarbamoyl})\text{benzyloxy}]-2-
30 fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
                     hydrochloride (Example 379),
                           2-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{
```

2-{4-[2-(4-chlorophenyl)-5-{(1-hydroxypropan-2-yl)carbamoyl}-benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 381),

fluorophenyl \}-1-cyclohexylbenzimidazole-5-carboxylic acid

hydrochloride (Example 380),

- 2-{4-[2-(4-chlorophenyl)-5-(methoxycarbamoyl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 382),
- $2-\{4-[2-(4-chlorophenyl)-5-\{(2,3-dihydroxypropyl)carbamoyl\}-$
- 5 benzyloxy]-2-fluorophenyl\{-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 383),
 - 2-{4-[2-(4-chlorophenyl)-5-(N-ethyl-N-methylcarbamoyl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 384),
- 2-{4-[2-(4-chlorophenyl)-5-(N-methyl-N-propylcarbamoyl)-benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 385),
- 2-{4-[2-(4-chlorophenyl)-5-(N-isopropyl-N-methylcarbamoyl)-benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 386),
 - 2-{4-[2-(4-chlorophenyl)-5-(2,6-dimethylpiperidin-1-ylcarbonyl)-benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 387),
 - $2-\frac{4-[5-(butylcarbamoyl)-2-(4-chlorophenyl)benzyloxy]-2-$
- fluorophenyl -1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 388),
 - 2-{4-[2-(4-chlorophenyl)-5-(propylcarbamoyl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 389),
- 25 2-{4-[2-(4-chlorophenyl)-5-(ethylcarbamoyl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 390),
 - 2-{4-[2-(4-chlorophenyl)-5-{ (dimethylcarbamoyl) amino benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
- 30 hydrochloride (Example 391),
 - 2-{4-[2-(4-chlorophenyl)-5-{(morpholinocarbonyl)amino}benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 392),
- 2-{4-[2-(4-chlorophenyl)-5-ureidobenzyloxy]-2-fluorophenyl}-135 cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 393),

```
2-{4-[2-(4-chlorophenyl)-5-{(ethylcarbamoyl)amino}benzyloxy]-2-
   fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
   hydrochloride (Example 394),
   2-{4-[2-(4-chlorophenyl)-5-{ (isopropylcarbamoyl) amino benzyloxy]-
5 2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
   hydrochloride (Example 395),
   2-\frac{1}{4}-[2-(3,4-\text{difluorophenyl})-5-(\text{isopropylcarbamoyl}) benzyloxy]-2-
   fluorophenyl \}-1-cyclohexylbenzimidazole-5-carboxylic acid (Example
   396),
2-4-[2-(2,4-difluorophenyl)-5-(isopropylcarbamoyl)benzyloxy]-2-
   fluorophenyl \}-1-cyclohexylbenzimidazole-5-carboxylic acid
   hydrochloride (Example 397),
    2-4-[2-(3,5-dichlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]-2-
   fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
15 hydrochloride (Example 398),
    2-{4-[2-(3-chloro-4-fluorophenyl)-5-(isopropylcarbamoyl)-
   benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic
   acid hydrochloride (Example 399),
    2-{4-[2-(3,4-dichlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]-2-
20 fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
   hydrochloride (Example 400),
    2-\{4-[2-(4-chloro-2-fluorophenyl)-5-(isopropylcarbamoyl)-
   benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic
   acid hydrochloride (Example 401),
25 2-{4-[2-(4-chloro-2-fluorophenyl)-5-(pyrrolidin-1-ylcarbonyl)-
   benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic
   acid hydrochloride (Example 402),
    2-{4-[2-(4-chloro-3-fluorophenyl)-5-(pyrrolidin-1-ylcarbonyl)-
   benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic
30 acid hydrochloride (Example 403),
    2-{4-[2-(4-chloro-3-fluorophenyl)-5-(isopropylcarbamoyl)-
   benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic
```

35 2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 405),

acid hydrochloride (Example 404),

 $2-\{4-[2-\{4-(methylthio)phenyl\}-5-(2-oxopyrrolidin-1-yl)benzyloxy]-$

```
fluorophenyl \}-1-cyclohexylbenzimidazole-5-carboxylic acid
  hydrochloride (Example 406),
   2-4-[4-chloro-2-(4-chlorophenyl)-5-(1,1-dioxoisothiazolidin-2-1)]
5 yl)benzyloxy]-2-fluorophenyl -1-cyclohexylbenzimidazole-5-
  carboxylic acid hydrochloride (Example 407),
   2-4-[4-chloro-2-(4-chlorophenyl)-5-(2-oxopyrrolidin-1-
  yl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-
   carboxylic acid hydrochloride (Example 408),
   2-\frac{4-[2-(4-chlorophenyl)-5-(isopropylaminosulfonyl)benzyloxy]-2-
   fluorophenyl \-1-cyclohexylbenzimidazole-5-carboxylic acid
   hydrochloride (Example 409),
   fluorophenyl}-1-cyclopentylbenzimidazole-5-carboxylic acid
15 hydrochloride (Example 410),
   2-{4-[2-(4-chlorophenyl)-5-(4-hydroxypiperidin-1-ylcarbonyl)-
   benzyloxy]-2-fluorophenyl}-1-cyclopentylbenzimidazole-5-carboxylic
   acid hydrochloride (Example 411),
    2-\left\{4-\left[2-\left(4-\text{chlorophenyl}\right)-5-\left(\text{isopropylcarbamoyl}\right)\text{benzyloxy}\right]-2-\right\}
20 fluorophenyl \-1-cyclopentylbenzimidazole-5-carboxylic acid
   hydrochloride (Example 412),
    2-{4-[2-(4-chlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]phenyl}-
   1-cyclopentylbenzimidazole-5-carboxylic acid hydrochloride
   (Example 413),
25 2-{4-[2-(4-chlorophenyl)-5-(dimethylcarbamoyl)benzyloxy]phenyl}-
   1-cyclopentylbenzimidazole-5-carboxylic acid hydrochloride
   (Example 414),
    2-44-[2-(4-chlorophenyl)-5-(4-hydroxypiperidin-1-
   ylcarbonyl)benzyloxy]phenyl}-1-cyclopentylbenzimidazole-5-
30 carboxylic acid hydrochloride (Example 415),
    2-\{4-[2-(4-chlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]phenyl\}-
   1-(tetrahydrothiopyran-4-yl)benzimidazole-5-carboxylic acid
   hydrochloride (Example 416),
    2-{4-[2-(4-chlorophenyl)-5-(pyrrolidin-1-ylcarbonyl)benzyloxy]-
35 phenyl \-1-(tetrahydrothiopyran-4-yl)benzimidazole-5-carboxylic
   acid hydrochloride (Example 417),
```

- 2-{4-[2-(4-chlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]-2-fluorophenyl}-1-(tetrahydrothiopyran-4-yl)benzimidazole-5-carboxylic acid hydrochloride (Example 418),
- $2-\frac{4}{2}-\frac{2-(4-\text{chlorophenyl})-5-(2-\text{oxopyrrolidin}-1-\text{yl})}{2-2-(4-\text{chlorophenyl})-5-(2-\text{oxopyrrolidin}-1-\text{yl})}$
- fluorophenyl \rangle -1 (tetrahydrothiopyran 4 yl) benzimidazole 5 carboxylic acid hydrochloride (Example 419),
 - 2-{4-[2-(4-chlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]-2-fluorophenyl}-1-piperidinobenzimidazole-5-carboxylic acid hydrochloride (Example 420),
- 10 2-\delta-[2-(4-chlorophenyl)-5-(pyrrolidin-1-ylcarbonyl)benzyloxy]-2-fluorophenyl\delta-1-piperidinobenzimidazole-5-carboxylic acid (Example 421),
- 2-\delta-[2-(4-chlorophenyl)-5-(2-imidazolin-2-yl)benzyloxy]-2-fluorophenyl\delta-1-cyclohexylbenzimidazole-5-carboxylic acid dihydrochloride (Example 422),
 - 2-\delta-[2-(4-chlorophenyl)-5-(2-oxooxazolidin-3-yl)benzyloxy]-2-fluorophenyl\delta-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 423),
 - $2-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{$
- 20 fluorophenyl \rangle -1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 424),
 - 2-\delta-[2-(4-chlorophenyl)-5-(2-oxazolin-2-ylamino)benzyloxy]-2-fluorophenyl\delta-1-cyclohexylbenzimidazole-5-carboxylic acid dihydrochloride (Example 425),
- 25 2-\(\dagger\) 4-[\(\lambda\) 2-[\(\dagger\) (dimethylcarbamoyl) methoxy\) methyl]-4-(4fluorophenyl) thiazol-5-yl\ methoxy] phenyl\(\rangle\)-1cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 426),
- ylmethyl)thiazol-5-yl\methoxy]phenyl\-1-cyclohexylbenzimidazole-5-carboxylic acid dihydrochloride (Example 427),
 - 2-\delta-[\delta-(4-fluorophenyl)-2-[(carbamoylmethoxy)methyl]thiazol-5-yl\methoxy]phenyl\delta-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 428),
- 2-\delta-[\delta-(4-fluorophenyl)-2-(methylcarbamoyl)thiazol-5yl\methoxy]-2-fluorophenyl\delta-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 429),

- 2-{4-[{4-(4-fluorophenyl)-2-{(2-hydroxyethyl)carbamoyl}thiazol-5-yl}methoxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 430),
- $2-\frac{4-[4-(4-fluorophenyl)-5-(dimethylcarbamoyl)thiophen-3-$
- 5 yl\methoxy]-2-fluorophenyl\-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 431),
 - 2-{4-[{2-(4-fluorophenyl)-5-(isopropylcarbamoyl)thiophen-3-yl}methoxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 432),
- 2-{4-[{2-(4-fluorophenyl)-5-(4-hydroxypiperidin-1-ylcarbonyl)thiophen-3-yl}methoxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 433),
 - $2-\frac{4-[2-(4-chlorophenyl)-5-(dimethylcarbamoyl)benzyloxy]-2-$
- fluorophenyl}-1-cyclohexyl-5-tetrazol-5-ylbenzimidazole (Example
 434),
 - 2-{4-[2-(4-carboxyphenyl)-5-chlorobenzyloxy]-2-fluorophenyl}-1-cyclohexyl-5-tetrazol-5-ylbenzimidazole hydrochloride (Example 435),
- 20 2-{4-[2-(4-chlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]-2-fluorophenyl}-1-cyclohexyl-5-(2,5-dihydro-5-oxo-4H-1,2,4-oxadiazol-3-yl)benzimidazole hydrochloride (Example 436),
 2-{4-[5-carboxy-2-(4-chlorophenyl)benzyloxy]-2-fluorophenyl}-5-cyano-1-cyclohexylbenzimidazole (Example 437),
- 25 2-{4-[2-(4-chlorophenyl)-5-(dimethylcarbamoyl)benzyloxy]-2-fluorophenyl}-5-cyano-1-cyclohexylbenzimidazole (Example 438), 2-{4-[{N-(4-dimethylcarbamoyl)-N-(4-fluorophenyl)amino}-methyl]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid (Example 439),
- 2-{5-[bis(3-fluorophenyl)methyl]-2-fluoro-4-hydroxyphenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid (Example 440),
 2-{3-[bis(3-fluorophenyl)methyl]-2-fluoro-4-hydroxyphenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid (Example 441),
 2-{4-[(3-dimethylcarbamoylphenyl)(4-fluorophenyl)methoxy]-2-
- 35 fluorophenyl \}-1-cyclohexylbenzimidazole-5-carboxylic acid
 hydrochloride (Example 442),

```
2-{4-[{3-(4-hydroxypiperidyl-1-ylcarbonyl)phenyl}(4-
   fluorophenyl)methoxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-
   carboxylic acid hydrochloride (Example 443),
    1-\left\{ \left[ 2-\left\{ 4-\left( \left[ 4-\left( 4-\text{fluorophenyl} \right) -2-\text{methylthiazol} -5-\right] \right] \right\} \right\} \right\}
 5 yl]methoxy)phenyl}-1-cyclohexylbenzimidazol-5-yl]carbonyl}-β-D-
   glucuronic acid (Example 444),
    {[2-{4-[bis(3-fluorophenyl)methoxy]-2-fluorophenyl}-1-
   cyclohexylbenzimidazol-5-yl]carbonyl\beta-\beta-D-glucuronic acid (Example
   445),
2-4-[2-(4-\text{chlorophenyl})-5-(1,1-\text{dioxoisothiazolidin}-2-
   yl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-
   carboxylic acid hydrochloride (Example 446),
   3-{[4-(5-aminosulfonyl-1-cyclohexylbenzimidazol-2-yl)-3-
   fluorophenoxy]methyl}-4-(4-chlorophenyl)-N-isopropylbenzamide
15 (Example 447),
    2-[4-{2-(4-chlorophenyl)-6-(isopropylaminocarbonyl)benzyloxy}-2-
   fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid
   hydrochloride (Example 448),
    2-[4-{2-(4-chlorophenyl)-4-fluoro-5-(1,1-dioxoisothiazolidin-2-
20 yl)benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-
   carboxylic acid hydrochloride (Example 449),
    2-[4-{2-(4-chlorophenyl)-5-(isopropylaminocarbonyl)benzyloxy}-2-
   fluorophenyl]-1-cyclohexyl-4-methoxybenzimidazole-5-carboxylic
   acid hydrochloride (Example 450),
25 2-[4-{2-(4-chlorophenyl)-5-(N-isopropylcarbonyl-N-
   methylamino)benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-
   5-carboxylic acid hydrochloride (Example 451),
    2-[4-{2-(4-chlorophenyl)-5-(isopropylcarbonylamino)benzyloxy}-2-
   fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid
30 hydrochloride (Example 452),
    2-[3-\{[4-(4-fluorophenyl)-2-methylthiazol-5-yl]methyl\}-4-
   hydroxyphenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid
   (Example 453),
    2-[4-{2-(4-chlorophenyl)-4-fluoro-5-(2-oxopyrrolidin-1-
35 yl)benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-
   carboxylic acid hydrochloride (Example 454),
```

```
2-[4-{2-(4-chlorophenyl)-5-(methylsulfonylamino)benzyloxy}-2-
   fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid
   hydrochloride (Example 455),
    2-[4-\{2-(4-chlorophenyl)-5-[N-methyl-N-
5 (methylsulfonyl) amino]benzyloxy}-2-fluorophenyl]-1-
   cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example
   456),
    2-[4-{[3-(4-chlorophenyl)-6-(2-oxopyrrolidin-1-yl)pyridin-2-}
   yl]methyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-
10 carboxylic acid hydrochloride (Example 457),
    2-[4-{2-(4-chlorophenyl)-5-(acetylamino)benzyloxy}-2-
   fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid
   hydrochloride (Example 458),
    2-[4-{2-(4-chlorophenyl)-5-(N-acetyl-N-ethylamino)benzyloxy}-2-
15 fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid
   hydrochloride (Example 459),
    2-[4-{2-(4-chlorophenyl)-5-(N-acetyl-N-propylamino)benzyloxy}-2-
   fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid
   hydrochloride (Example 460),
20 2-[4-{2-(4-chlorophenyl)-5-[N-ethyl-N-(methylsulfonyl)amino]-
   benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic
   acid hydrochloride (Example 461),
    2-[4-{2-(4-chlorophenyl)-5-[N-(methylsulfonyl)-N-
   propylamino|benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-
25 5-carboxylic acid hydrochloride (Example 462),
    2-[4-{2-(4-chlorophenyl)-5-(N-acetyl-N-methylamino)benzyloxy}-2-
   fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid
   hydrochloride (Example 463),
    2-[4-(2-(4-chlorophenyl)-5-[N-(ethylsulfonyl)-N-methylamino]-
30 benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic
   acid hydrochloride (Example 464),
    2-[4-{2-(4-chlorophenyl)-5-[N-ethyl-N-(ethylsulfonyl)amino]-
   benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic
   acid hydrochloride (Example 465),
35 2-[4-{2-(4-chlorophenyl)-5-[N-(ethylcarbonyl)-N-methylamino]-
   benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic
   acid hydrochloride (Example 466),
```

- 2-[4-{2-(4-chlorophenyl)-5-[N-ethyl-N-(ethylcarbonyl)amino]-benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylicacid hydrochloride (Example 467),
- 2-[4-{2-(4-chlorophenyl)-5-methoxybenzyloxy}-2-fluorophenyl]-1-
- 5 cyclohexylbenzimidazole-5-carboxylic acid (Example 468),
 - 2-[4-{2-(4-chlorophenyl)-5-(N-acetyl-N-isopropylamino)-benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride (Example 469),
 - ${[2-{4-[2-(4-chlorophenyl)-5-(2-oxopyrrolidin-1-yl)benzyloxy]-2-}$
- 10 fluorophenyl}-1-cyclohexylbenzoimidazol-5-yl]carbonyl}- β -D-glucuronic acid (Example 470),
 - 2-{4-[2-(4-chlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]phenyl}-3-cyclohexyl-3H-imidazo[4,5-b]pyridine-6-carboxylic acid hydrochloride (Example 702), and
- 2-\d-[2-(4-chlorophenyl)-5-(pyrrolidin-1-ylcarbonyl)benzyloxy]phenyl\delta-3-cyclohexyl-3H-imidazo[4,5-b]pyridine-6-carboxylic acid
 hydrochloride (Example 703).
 - (63) A pharmaceutical composition comprising a fused ring compound of any of (29) to (62) above, or a pharmaceutically
- 20 acceptable salt thereof, and a pharmaceutically acceptable carrier.
- (64) A hepatitis C virus polymerase inhibitor comprising a fused ring compound of any of (1) to (28) and (29) to (62) above, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.
 - (65) An anti-hepatitis C virus agent comprising a fused ring compound of any of (1) to (28) and (29) to (62) above, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.
- 30 (66) A therapeutic agent for hepatitis C comprising a fused ring compound of any of (29) to (62) above, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.
- (67) An anti-hepatitis C virus agent comprising (a) the anti35 hepatitis C virus agent of (65) above and (b) at least one agent
 selected from the group consisting of a different antiviral agent,
 an antiinflammatory agent and an immunostimulant.

- (68) An anti-hepatitis C virus agent comprising (a) the anti-hepatitis C virus agent of (65) above and (b) interferon.
- (69) A therapeutic agent for hepatitis C comprising (a) the hepatitis C virus polymerase inhibitor of (64) above and (b) at
- 5 least one agent selected from the group consisting of a different antiviral agent, an antiinflammatory agent and an immunostimulant.
 - (70) A therapeutic agent for hepatitis C comprising (a) the hepatitis C virus polymerase inhibitor of (64) above and (b) interferon.
- 10 (71) A benzimidazole compound of the following formula [III]

$$R^{a36}0 \xrightarrow{N} R^{a38} OH \qquad [III]$$

wherein R^{a36} is hydrogen atom or carboxyl-protecting group, R^{a37} is cyclopentyl or cyclohexyl, and R^{a38} is hydrogen atom or fluorine atom, or a salt thereof.

- 15 (72) A thiazole compound selected from the group consisting of 4-(4-fluorophenyl)-5-hydroxymethyl-2-methylthiazole and 4-(4-fluorophenyl)-5-chloromethyl-2-methylthiazole, or a pharmaceutically acceptable salt thereof.
- (73) A biphenyl compound selected from the group consisting of 120 (4'-chloro-2-hydroxymethyl-biphenyl-4-yl)-2-pyrrolidinone and 1(4'-chloro-2-chloromethyl-biphenyl-4-yl)-2-pyrrolidinone, or a
 pharmaceutically acceptable salt thereof.
- (74) A pharmaceutical composition comprising (a) a fused ring compound of the formula [I] of (1) above or a pharmaceutically acceptable salt thereof and (b) at least one agent selected from the group consisting of an antiviral agent other than the compound of (1) above, an antiinflammatory agent and an immunostimulant.
- (75) A pharmaceutical composition comprising (a) a fused ring 30 compound of the formula [I] of (1) above or a pharmaceutically acceptable salt thereof and (b) interferon.
 - (76) A method for treating hepatitis C, which comprises administering an effective amount of a fused ring compound of the

- formula [I] of (1) above or a pharmaceutically acceptable salt thereof.
- (77) The method of (76) above, further comprising administering an effective amount of at least one agent selected from the group consisting of an antiviral agent other than the compound of (1) above, an antiinflammatory agent and an immunostimulant.
 - (78) The method of (76) above, further comprising administering an effective amount of interferon.
- (79) A method for inhibiting hepatitis C virus polymerase, which comprises administering an effective amount of a fused ring compound of the formula [I] of (1) above or a pharmaceutically acceptable salt thereof.
- (80) The method of (79) above, further comprising administering an effective amount of at least one agent selected from the group consisting of an antiviral agent other than the compound of (1) above, an antiinflammatory agent and an immunostimulant.
 - (81) The method of (79) above, further comprising administering an effective amount of interferon.
- (82) Use of a fused ring compound of the formula [I] of (1) above or a pharmaceutically acceptable salt thereof for the production of a pharmaceutical agent for treating hepatitis C.
 - (83) Use of a fused ring compound of the formula [I] of (1) above or a pharmaceutically acceptable salt thereof for the production of a hepatitis C virus polymerase inhibitor.
- 25 (84) A pharmaceutical composition for the treatment of hepatitis C, which comprises a fused ring compound of the formula [I] of (1) above or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.
- (85) A pharmaceutical composition for inhibiting hepatitis C virus polymerase, which comprises a fused ring compound of the formula [I] of (1) above or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.
 - (86) A commercial package comprising a pharmaceutical composition of (84) above and a written matter associated therewith, the
- 35 written matter stating that the pharmaceutical composition can or should be used for treating hepatitis C.
 - (87) A commercial package comprising a pharmaceutical composition of (85) above and a written matter associated therewith, the

written matter stating that the pharmaceutical composition can or should be used for inhibiting hepatitis C virus polymerase.

The definitions of respective substituents and moieties used in the present specification are as follows.

The halogen atom is a fluorine atom, chlorine atom, bromine atom or iodine atom, preferably fluorine atom, chlorine atom or bromine atom.

Particularly preferably, the halogen atom is fluorine atom at R^5 , R^6 , R^6 , R^6 , group A and group C, and fluorine atom or chlorine atom at X, Z, Z', group B and group D.

The C_{1-6} alkyl is straight chain or branched chain alkyl having 1 to 6 carbon atoms, and is exemplified by methyl, ethyl, propyl, isopropyl, butyl, isobutyl, sec-butyl, tert-butyl, pentyl, isopentyl, tert-pentyl, hexyl and the like.

Preferably, it is straight chain or branched chain alkyl having 1 to 4 carbon atoms, and is particularly preferably methyl at R^{a7} , R^{a8} , R^{a9} , R^{a15} , R^{a16} , R^{a17} , R^{a33} , R^{a35} , R^{b6} and R^{b7} and methyl or tert-butyl at R^{b1} , R^{b2} , group B and group C, and methyl, ethyl, propyl or isopropyl at R^{a29} .

The halogenated C_{1-6} alkyl is the above-defined C_{1-6} alkyl except that it is substituted by the above-defined halogen atom. Preferably, it is halogenated alkyl wherein the alkyl moiety thereof is straight chain or branched chain alkyl having 1 to 4 carbon atoms. Examples thereof include fluoromethyl,

difluoromethyl, trifluoromethyl, bromomethyl, chloromethyl, 1,2-dichloromethyl, 2,2-dichloromethyl, 2,2,2-trifluoroethyl and the like.

The halogenated C_{1-6} alkyl is particularly preferably trifluoromethyl at group B.

The C_{1-6} alkylene is straight chain alkylene having 1 to 6 carbon atoms, and is exemplified by methylene, ethylene, trimethylene, tetramethylene, pentamethylene or hexamethylene.

The $C_{1\text{--}6}$ alkylene is preferably methylene or ethylene at Y.

The C_{2-6} alkenylene is straight chain alkenylene having 2 to 6 carbon atoms, and is exemplified by vinylene, propenylene, 1-butenylene, 1,3-butadienylene and the like.

The C_{2-6} alkenylene is preferably vinylene at Y.

The C_{1-6} alkoxy is alkyloxy wherein the alkyl moiety thereof is the above-defined C_{1-6} alkyl. Preferably, it is alkoxy wherein the alkyl moiety thereof is straight chain or branched chain alkyl having 1 to 4 carbon atoms. Examples thereof include 5 methoxy, ethoxy, propoxy, isopropyloxy, butoxy, isobutyloxy, tert-butyloxy, pentyloxy, hexyloxy and the like.

The C_{1-6} alkoxy is particularly preferably methoxy at R^{a2} , R^{a3} , R^{a27} , R^{a28} , R^{a33} , group A and group C.

The C_{1-6} alkoxy C_{1-6} alkoxy is that wherein C_{1-6} alkoxy in the above definition is substituted by C_{1-6} alkoxy defined above and is preferably that wherein the alkyl moiety thereof is straight chain or branched chain alkyl having 1 to 4 carbon atoms. Specific examples include methoxymethyl, ethoxymethyl, methoxyethoxy, methoxypropoxy, isopropyloxyethoxy and the like.

The group A is particularly preferably methoxyethoxy.

15

The C_{1-6} alkanoyl is alkylcarbonyl wherein the alkyl moiety thereof is the above-defined C_{1-6} alkyl. Preferably, it is alkanoyl wherein the alkyl moiety thereof is straight chain or branched chain alkyl having 1 to 4 carbon atoms. Examples thereof include acetyl, propionyl, butyryl, isobutyryl, pivaloyl and the like.

The C_{1-6} alkanoyl is particularly preferably acetyl at R^1 , R^2 , R^3 , R^4 , R^{a5} , R^{a29} , R^{b7} and group B.

The C₁₋₆ alkoxycarbonyl is alkyloxycarbonyl wherein the
25 alkoxy moiety thereof is the above-defined C₁₋₆ alkoxy. Preferably,
it is alkoxycarbonyl wherein the alkyl moiety thereof is straight
chain or branched chain alkyl having 1 to 4 carbon atoms.
Examples thereof include methoxycarbonyl, ethoxycarbonyl,
propoxycarbonyl, isopropyloxycarbonyl, butoxycarbonyl,
30 isobutyloxycarbonyl, tert-butyloxycarbonyl, pentyloxycarbonyl,
hexyloxycarbonyl and the like.

The C_{1-6} alkoxycarbonyl is particularly preferably methoxycarbonyl or ethoxycarbonyl at R^{a10} and group A.

The C_{1-6} alkylamino is alkylamino or dialkylamino wherein the alkyl moiety thereof is the above-defined C_{1-6} alkyl. Preferably, it is alkylamino or dialkylamino wherein the alkyl moiety thereof is straight chain or branched chain alkyl having 1 to 4 carbon atoms. Examples thereof include methylamino,

ethylamino, propylamino, isopropylamino, butylamino, isobutylamino, tert-butylamino, pentylamino, hexylamino, dimethylamino, diethylamino, methylethylamino, N-isopropyl-N-isobutylamino and the like.

5

25

The C_{1-6} alkylamino is particularly preferably methylamino at R^{a7} , and particularly preferably dimethylamino at R^{a21} and group A, and particularly preferably dimethylamino, ethylamino or isopropylamino at R^{a24} .

The C_{1-6} alkanoylamino is alkylcarbonylamino wherein the alkanoyl moiety thereof is the above-defined C_{1-6} alkanoyl. Preferably, it is alkylcarbonylamino wherein the alkyl moiety thereof is straight chain or branched chain alkyl having 1 to 4 carbon atoms. Examples thereof include acetylamino, propionylamino, butyrylamino, isobutyrylamino, pivaloylamino and the like.

The C_{1-6} alkanoylamino is particularly preferably acetylamino at X and R^{alo} .

The C_{1-6} alkylsulfonyl is alkylsulfonyl wherein the alkyl moiety thereof is the above-defined C_{1-6} alkyl. Preferably, it is alkylsulfonyl wherein the alkyl moiety thereof is straight chain or branched chain alkyl having 1 to 4 carbon atoms. Examples thereof include methylsulfonyl, ethylsulfonyl, propylsulfonyl, isopropylsulfonyl, butylsulfonyl, isobutylsulfonyl, tertbutylsulfonyl, pentylsulfonyl, hexylsulfonyl and the like.

The C_{1-6} alkylsulfonyl is particularly preferably methylsulfonyl at X and $R^{a5}\,.$

The C_{6-14} aryl is aromatic hydrocarbon having 6 to 14 carbon atoms. Examples thereof include phenyl, naphthyl, anthryl, indenyl, azulenyl, fluorenyl, phenanthryl and the like.

The C_{6-14} aryl is preferably phenyl or naphthyl, particularly preferably phenyl at the ring A, ring A', ring B and ring B'.

The C_{3-8} cycloalkyl is saturated cycloalkyl having 3 to 8, preferably 5 to 7, carbon atoms. Examples thereof include cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cycloheptyl and cyclooctyl.

The C_{3-8} cycloalkyl is particularly preferably cyclohexyl at the ring A, ring A', ring B and ring B'.

The C_{3-8} cycloalkenyl is cycloalkenyl having 3 to 8, preferably 5 to 7, carbon atoms and has at least 1, preferably 1 or 2, double bond(s). Examples thereof include cyclopropenyl, cyclobutenyl, cyclopentenyl, cyclopentadienyl, cyclohexenyl, 2,4-5 cyclohexadien-1-yl, 2,5-cyclohexadien-1-yl, cycloheptenyl and cyclooctenyl and the like, but do not include aryl (e.g., phenyl) or completely saturated cycloalkyl.

The C_{3-8} cycloalkenyl is preferably cyclohexenyl at the ring A and ring A'.

10

The heterocyclic group has, as an atom constituting the ring, 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom, besides a carbon atom, and includes saturated ring and unsaturated ring, monocyclic ring and fused ring having the number of ring atom constituting the ring 15 of 3 to 14.

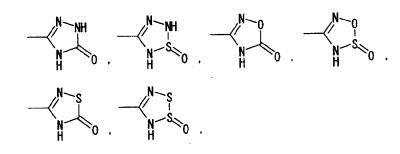
The heterocyclic group as a monocyclic ring includes, for example, pyridyl, pyrazinyl, pyrimidinyl, pyridazinyl, 1,3,5triazinyl, pyrrolyl, pyrazolyl, imidazolyl, 1,2,4-triazolyl, tetrazolyl, thienyl, furyl, oxazolyl, isoxazolyl, thiazolyl, 20 isothiazolyl, thiadiazolyl, pyrrolinyl, pyrrolidinyl, imidazolidinyl, piperidyl, piperazinyl, morpholinyl, thiomorpholinyl, tetrahydropyranyl and the like.

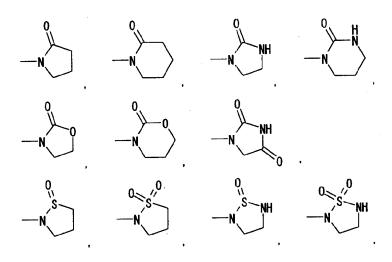
The heterocyclic group includes the groups of the following formulas.

wherein E^1 is an oxygen atom, a sulfur atom or $N(-R^{a35})$, E^2 is an oxygen atom, CH_2 or $N(-R^{a35})$, E^3 is an oxygen atom or a sulfur atom, wherein R^{a35} is independently hydrogen atom or C_{1-6} alkyl, f is an integer of 1 to 3, and h and h' are the same or different and each is an integer of 1 to 3.

Specific examples of the heterocyclic group include

10





5 and the like.

Examples of the heterocyclic group as a fused ring include quinolyl, isoquinolyl, quinazolinyl, quinoxalyl, phthalazinyl, cinnolinyl, naphthyridinyl, 5,6,7,8-tetrahydroquinolyl, indolyl, benzimidazolyl, 2,3-dihydrobenzimidazolyl, 2,3-dihydro-2-oxobenzimidazolyl, indolinyl, benzofuranyl, benzothienyl, benzothiazolyl, benzothiazolyl and the like.

Preferably, it is a heterocyclic group which is a 5membered or a 6-membered monocyclic group. Examples thereof
include pyridyl, pyrazinyl, pyrimidinyl, pyridazinyl, 1,3,5triazinyl, pyrrolyl, pyrazolyl, imidazolyl, 1,2,4-triazolyl,
tetrazolyl, thienyl, furyl, oxazolyl, isoxazolyl, thiazolyl,
isothiazolyl, thiadiazolyl, pyrrolidinyl, piperidyl, piperazinyl

5

$$-N \longrightarrow 0 \qquad -N \longrightarrow S = 0 \qquad -N \longrightarrow S \lesssim_0^0$$

$$-N \longrightarrow 0 \qquad N \longrightarrow 0 \qquad N \longrightarrow 0 \qquad N \longrightarrow 0$$

and the like.

At R^1 , R^2 , R^3 , R^4 , Z and group D, tetrazolyl and 5-oxo- Δ^2 10 1,2,4-oxadiazolin-3-yl are particularly preferable.

The heterocyclic group is preferably pyridyl, pyrazinyl, pyrimidinyl or pyridazinyl which is an aromatic group, and particularly preferably pyridyl at the ring A and ring A^{\prime} .

The heterocyclic group is particularly preferably pyridyl,

5 pyrazinyl, pyrimidinyl, pyridazinyl, 1,3,5-triazinyl, pyrrolyl,
 pyrazolyl, imidazolyl, 1,2,4-triazolyl, tetrazolyl, thienyl,
 furyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl or
 thiadiazolyl, which is an aromatic group, at the ring B and ring
 B'. More preferably it is pyridyl or thiazolyl, most preferably
 thiazolyl.

The C_{6-14} aryl C_{1-6} alkyl is arylalkyl wherein the alkyl moiety thereof is the above-defined C_{1-6} alkyl and the aryl moiety is the above-defined C_{6-14} aryl. Preferably, it is arylalkyl wherein the alkyl moiety thereof is straight chain alkyl having 1 to 4 carbon atoms and the aryl moiety is phenyl. Examples thereof include benzyl, phenethyl, 3-phenylpropyl, 2-phenylpropyl, 4-phenylbutyl and the like.

The C_{6-14} aryl C_{1-6} alkyl is particularly preferably benzyl at R^{a8} and R^{b6} .

The glucuronic acid residue is glucuronic acid less any hydroxyl group, preferably $\beta\text{-D-glucuronic}$ acid substituted at 1-position.

20

The C_{6-14} aryl C_{1-6} alkyloxycarbonyl is arylalkyloxycarbonyl wherein the C_{6-14} aryl C_{1-6} alkyl moiety thereof is the above-defined C_{6-14} aryl C_{1-6} alkyl. Preferably, it is arylalkyloxycarbonyl wherein the alkyl moiety thereof is straight chain alkyl having 1 to 4 carbon atoms and the aryl moiety is phenyl. Examples thereof include benzyloxycarbonyl, phenethyloxycarbonyl, 3-phenylpropyloxycarbonyl, 2-phenylpropyloxycarbonyl, 4-phenylbutyloxycarbonyl and the like.

The C_{6-14} aryl C_{1-6} alkyloxycarbonyl is particularly preferably benzyloxycarbonyl at $R^{\rm b7}$.

The optionally substituted C_{1-6} alkyl is the above-defined C_{1-6} alkyl, preferably that wherein straight chain or branched chain alkyl having 1 to 4 carbon atoms is optionally substituted with 1 to 3 substituent(s), and includes unsubstituted alkyl. The substituent(s) is(are) selected from the above-defined halogen atom, hydroxyl group, carboxyl, amino, the above-defined C_{1-6}

alkoxy, the above-defined C₁₋₆ alkoxy C₁₋₆ alkoxy, the above-defined C₁₋₆ alkoxycarbonyl and the above-defined C₁₋₆ alkylamino. Examples of optionally substituted C₁₋₆ alkyl include methyl, ethyl, propyl, isopropyl, butyl, isobutyl, sec-butyl, tert-butyl, pentyl, isopentyl, tert-pentyl, neopentyl, 1-ethylpropyl, hexyl, trifluoromethyl, hydroxymethyl, 2-hydroxyethyl, 3-hydroxypropyl, 4-hydroxybutyl, 1-hydroxy-1-methylethyl, 1-hydroxypropan-2-yl, 1,3-dihydroxypropan-2-yl, 1-hydroxy-2-methylpropan-2-yl, carboxylmethyl, 2-carboxylethyl, methoxymethyl, methoxyethyl, methoxyethyl, methoxyethyl, 2-dimethylaminoethyl and the like.

Preferably, the optionally substituted C_{1-6} alkyl is methyl, 1-hydroxy-1-methylethyl, carboxylmethyl or 2-dimethylaminoethyl at R^1 , R^2 , R^3 and R^4 , methyl or trifluoromethyl at R^5 , R^5 , R^6 and 15 R^{6} , methyl at R^{7} , R^{8} , R^{a31} and R^{b5} , methyl, ethyl or isopropyl at R^{a24} , methyl or isopropyl at R^{a18} , methyl or ethyl at R^{a1} , R^{a19} and R^{a25}, methyl, carboxylmethyl or 2-dimethylaminoethyl at R^{a2} and R^{a3}, methyl or carboxylmethyl at R^{a6}, methyl, ethyl, isopropyl, butyl or trifluoromethyl at X, methyl, ethyl, isopropyl, butyl, 20 isobutyl, tert-butyl, isopentyl, neopentyl, 1-ethylpropyl or carboxylmethyl at R^{alo}, methyl, ethyl, propyl, isopropyl, butyl, isobutyl, trifluoromethyl, 2-hydroxyethyl or carboxylmethyl at R^{all}, methyl or 4-hydroxybutyl at R^{al2}, methyl, ethyl, isopropyl, butyl, 2-hydroxyethyl, 4-hydroxybutyl, ethoxycarbonylmethyl, 2-25 (ethoxycarbonyl) ethyl or 2-dimethylaminoethyl at R^{al3}, methyl, propyl, butyl, isopentyl, trifluoromethyl, hydroxymethyl, 2hydroxyethyl, 3-hydroxypropyl, methoxyethyl, methoxyethoxyethyl or carboxymethyl at R^{a20} , methyl or ethyl at R^{a22} and R^{a23} , methyl isopropyl or tert-butyl at R^{a26}, methyl, ethyl, propyl, isopropyl, 30 butyl, tert-butyl, isobutyl, 2-hydroxyethyl, 1-hydroxypropan-2-yl, 1-hydroxy-2-methylpropan-2-yl or carboxylmethyl at Ra27 and Ra28, and methyl, ethyl, propyl, isopropyl, tert-butyl, trifluoromethyl, hydroxymethyl, 2-hydroxyethyl, 2-carboxylethyl, methoxymethyl or ethoxycarbonylmethyl at Z, Z' and group D.

It is particularly preferably, trifluoromethyl at R^5 , R^5 , R^6 and R^6 , methyl or tert-butyl at R^{a26} , methyl, tert-butyl, trifluoromethyl or hydroxymethyl at Z, Z' and group D, and methyl at other substituents.

The optionally substituted C₂₋₆ alkenyl is that wherein straight chain or branched chain alkenyl having 2 to 6 carbon atoms is optionally substituted by 1 to 3 substituent(s), and includes unsubstituted alkenyl. The substituent(s) is(are)

5 selected from the above-defined halogen atom, hydroxyl group, carboxyl, amino, the above-defined C₁₋₆ alkoxy, the above-defined C₁₋₆ alkoxy C₁₋₆ alkoxy, the above-defined C₁₋₆ alkoxycarbonyl and the above-defined C₁₋₆ alkylamino. Examples of optionally substituted C₂₋₆ alkenyl include vinyl, allyl, 1-propenyl,

10 isopropenyl, 1-butenyl, 2-butenyl, 1,3-butadienyl, 2-isopentenyl, 3-isohexenyl, 4-methyl-3-pentenyl, 2-carboxylethenyl and the like.

The optionally substituted C_{2-6} alkenyl is preferably 2-carboxylethenyl at X, and preferably 2-isopentenyl, 3-isohexenyl or 4-methyl-3-pentenyl at R^{a20} .

The optionally substituted C₂₋₆ alkynyl is that wherein straight chain or branched chain alkynyl having 2 to 6 carbon atoms is optionally substituted by 1 to 3 substituent(s), and includes unsubstituted alkynyl. The substituent(s) is(are) selected from the above-defined halogen atom, hydroxyl group, carboxyl, amino, the above-defined C₁₋₆ alkoxy, the above-defined C₁₋₆ alkoxycarbonyl and the above-defined C₁₋₆ alkylamino. Examples thereof include ethynyl, 1-propynyl, 2-propynyl, 3-butynyl and the like.

The optionally substituted C_{2-6} alkynyl is preferably 2- 25 propynyl at R^{a20} .

The C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from group B is that wherein the above-defined C_{6-14} aryl is optionally substituted by 1 to 5 substituent(s), and includes unsubstituted aryl. The 30 substituent(s) is(are) selected from the above-defined halogen atom, cyano, nitro, the above-defined C_{1-6} alkyl, the above-defined halogenated C_{1-6} alkyl, the above-defined C_{1-6} alkanoyl, $-(CH_2)_r-COOR^{b1}$, $-(CH_2)_r-CONR^{b1}R^{b2}$, $-(CH_2)_r-NR^{b1}R^{b2}$, $-(CH_2)_r-NR^{b1}-COR^{b2}$, $-(CH_2)_r-NHSO_2R^{b1}$, $-(CH_2)_r-OR^{b1}$, $-(CH_2)_r-SR^{b1}$, $-(CH_2)_r-SO_2R^{b1}$ and 35 $-(CH_2)_r-SO_2NR^{b1}R^{b2}$ (wherein R^{b1} and R^{b2} are each independently hydrogen atom or the above-defined C_{1-6} alkyl and r is 0 or an integer of 1 to 6).

Examples thereof include phenyl, naphthyl, anthryl, indenyl, azulenyl, fluorenyl, phenanthryl, 3-fluorophenyl, 4-fluorophenyl, 3-chlorophenyl, 4-chlorophenyl, 2,4-dichlorophenyl, 3,5-dichlorophenyl, pentafluorophenyl, 4-methylphenyl, 4-tert-butylphenyl, 2-trifluoromethylphenyl, 4-trifluoromethylphenyl, 4-nitrophenyl, 4-cyanophenyl, 4-acetylphenyl, 4-carboxylphenyl, 4-carbamoylphenyl, 4-aminophenyl, 4-dimethylaminophenyl, 4-acetylaminophenyl, 4-methoxyphenyl, 3,4,5-trimethoxyphenyl, 4-methylthiophenyl, 4-methylsulfonylphenyl, 4-methylsulfonylphenyl, 3-nitro-4-methoxyphenyl and 4-nitro-3-methoxyphenyl.

The aryl moiety is preferably phenyl, the group B here is preferably the above-defined halogen atom, nitro, the above-defined C_{1-6} alkyl, the above-defined halogenated C_{1-6} alkyl or $-(CH_2)_r-OR^{b1}$. Examples of group B include fluorine atom, chlorine atom, nitro, methyl, tert-butyl, trifluoromethyl and methoxy. Particularly preferably, it is fluorine atom or chlorine atom.

With regard to "C₆₋₁₄ aryl optionally substituted by 1 to 5 substituent(s) selected from group B", it is preferably phenyl, 20 4-tert-butylphenyl, 4-fluorophenyl, 3-chlorophenyl, 4-chlorophenyl, 4-methoxyphenyl or 4-trifluoromethylphenyl at R^{a12}, R^{a27} and R^{a28}, phenyl at R^{a14}, R^{a22}, R^{a23}, R^{a26} and R^{b5}, phenyl or 3-fluorophenyl at R^{a18}, phenyl or 2,4-dichlorophenyl at R^{a20}, phenyl, 4-chlorophenyl, 4-trifluoromethylphenyl, 3,5-dichlorophenyl, 3-nitro-4-methoxyphenyl or 4-nitro-3-methoxyphenyl at R^{a24}, and phenyl or 4-methylphenyl at R^{a25}.

It is particularly preferably phenyl at other substituents. The C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from group D is that wherein the above-defined C_{6-14} aryl is optionally substituted by 1 to 5 substituent(s), and includes unsubstituted aryl. The substituent(s) is(are) selected from the above-mentioned group D (substituents shown under (a) to (q)).

Examples of group D here include fluorine atom, chlorine atom, bromine atom, nitro, cyano, methyl, ethyl, propyl, isopropyl, tert-butyl, trifluoromethyl, hydroxymethyl, 2-hydroxyethyl, methoxymethyl, 2-carboxylethyl, methoxycarbonylmethyl, ethoxycarbonylmethyl, acetyl, carboxyl,

methoxycarbonyl, ethoxycarbonyl, carbamoyl, methylaminocarbonyl,
isopropylaminocarbonyl, dimethylaminocarbonyl,
diethylaminocarbonyl, (2-hydroxyethyl)aminocarbonyl,
(carboxylmethyl)aminocarbonyl, hydroxyl group, methoxy, ethoxy,
propyloxy, isopropyloxy, isopentyloxy, 2-isopentenyloxy, 3isohexenyloxy, 4-methyl-3-pentenyloxy, 2-propynyloxy,
hydroxymethyloxy, carboxylmethyloxy,
(dimethylaminocarbonyl)methyloxy, amino, methylamino,
dimethylamino, diethylamino, acetylamino, methylsulfonylamino,
methylthio, methylsulfonyl, methylsulfinyl, aminosulfonyl,
methylaminosulfonyl, dimethylaminosulfonyl and tetrazolyl.

Examples of C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from group D include phenyl, naphthyl, anthryl, indenyl, azulenyl, fluorenyl, phenanthryl, 3
15 fluorophenyl, 4-fluorophenyl, 3-chlorophenyl, 4-chlorophenyl, 2,4-dichlorophenyl, 3,5-dichlorophenyl, 4-bromophenyl, 4
nitrophenyl, pentafluorophenyl, 4-methylphenyl, 4-tert
butylphenyl, 2-trifluoromethylphenyl, 4-trifluoromethylphenyl, 4
(hydroxymethyl)phenyl, 4-(methoxymethyl)phenyl, 4-(2
20 carboxylethyl)phenyl, 3-carboxylphenyl, 4-carboxylphenyl, 4
methoxyphenyl, 3,4,5-trimethoxyphenyl, 4-carbamoylphenyl, 4
methylsulfonylphenyl, 4-acetylaminocarbonyl)phenyl, 4
methylsulfonylphenyl, 4-acetylaminophenyl, 4-cyanophenyl, 4
acetylphenyl, 4-aminophenyl, 4-dimethylaminophenyl, 4
aminosulfonylphenyl and 3-nitro-4-methoxyphenyl, 4-nitro-3-

At Z and Z', the aryl moiety is preferably phenyl.

methoxyphenyl and 4-tetrazol-5-ylphenyl.

The group D here is preferably the above-defined halogen atom, nitro, the above-defined optionally substituted C_{1-6} alkyl, $-(CH_2)_t-COOR^{a19}, -(CH_2)_t-CONR^{a27}R^{a28}, -(CH_2)_t-OR^{a20}, -(CH_2)_t-NR^{a29}CO-R^{a24}, \\ -(CH_2)_t-S(O)_q-R^{a25} \text{ or } -(CH_2)_t-SO_2-NHR^{a26}.$

Particularly preferably, it is the above-defined halogen atom, the above-defined optionally substituted C_{1-6} alkyl, $-(CH_2)_t - COOR^{a19}, -(CH_2)_t - CONR^{a27}R^{a28}, -(CH_2)_t - OR^{a20} \text{ or } -(CH_2)_t - S(0)_q - R^{a25},$ which is specifically fluorine atom, chlorine atom, bromine atom, nitro, methyl, tert-butyl, carboxyl, trifluoromethyl, hydroxymethyl, methoxymethyl, 2-carboxylethyl, methoxy, carbamoyl,

methylthio, dimethylaminocarbonyl, methylsulfonyl or acetylamino. More preferably, it is fluorine atom, chlorine atom, methyl, tert-butyl, carboxyl, methoxy, carbamoyl, methylthio, dimethylaminocarbonyl, methylsulfonyl or acetylamino, most preferably fluorine atom or chlorine atom.

Examples of C₆₋₁₄ aryl optionally substituted by 1 to 5 substituent(s) selected from group D preferably include phenyl, 3-fluorophenyl, 4-fluorophenyl, 3-chlorophenyl, 4-chlorophenyl, 3,5-dichlorophenyl, 4-bromophenyl, 4-nitrophenyl, 4-methylphenyl, 4-tert-butylphenyl, 2-trifluoromethylphenyl, 4-trifluoromethylphenyl, 4-(hydroxymethyl)phenyl, 4-(methoxymethyl)phenyl, 4-(2-carboxylethyl)phenyl, 3-carboxylphenyl, 4-carboxylphenyl, 4-methoxyphenyl, 3,4,5-trimethoxyphenyl, 4-carbomylphenyl, 4-methylsulfonylphenyl, 4-scetylaminocarbonyl)phenyl, 4-methylsulfonylphenyl, 4-aminosulfonylphenyl, 4-cyanophenyl and 4-tetrazolylphenyl, particularly preferably 4-chlorophenyl.

The heterocyclic group optionally substituted by 1 to 5 substituent(s) selected from group B is that wherein the above-defined heterocyclic group is optionally substituted by 1 to 5 substituent(s), and includes unsubstituted heterocyclic group. The substituent(s) is(are) selected from the above-defined halogen atom, cyano, nitro, the above-defined C₁₋₆ alkyl, the above-defined halogenated C₁₋₆ alkyl, the above-defined C₁₋₆ alkanoyl, -(CH₂)_r-COOR^{b1}, -(CH₂)_r-CONR^{b1}R^{b2}, -(CH₂)_r-NR^{b1}R^{b2}, -(CH₂)_r-NR^{b1}-COR^{b2}, -(CH₂)_r-NHSO₂R^{b1}, -(CH₂)_r-OR^{b1}, -(CH₂)_r-SR^{b1}, -(CH₂)_r-SO₂NR^{b1} and -(CH₂)_r-SO₂NR^{b1}R^{b2} wherein R^{b1} and R^{b2} are each independently hydrogen atom or the above-defined C₁₋₆ alkyl and r is 0 or an integer of 1 to 6.

Examples thereof include 2-pyridyl, 3-pyridyl, 4-pyridyl, 3-fluoropyridin-4-yl, 3-chloropyridin-4-yl, 4-chloropyridin-3-yl, pyrazinyl, pyrimidinyl, pyridazinyl, 1,3,5-triazinyl, pyrrolyl, pyrazolyl, imidazolyl, 1,2,4-triazolyl, tetrazolyl, 2-thienyl, 3-35 thienyl, furyl, oxazolyl, 2-methyloxazol-4-yl, isoxazolyl, thiazolyl, 2-methylthiazol-4-yl, 2,5-dimethylthiazol-4-yl, 2,4-dimethylthiazol-5-yl, isothiazolyl, thiadiazolyl, pyrrolinyl, pyrrolidinyl, 3-hydroxypyrrolidinyl, imidazolidinyl, azetidinyl,

piperidyl, 3-hydroxypiperidino, 4-hydroxypiperidino, 3,4-dihydroxypiperidino, 4-methoxypiperidino, 4-carboxypiperidino, 4-(hydroxymethyl)piperidino, 2,2,6,6-tetramethylpiperidino, 2,2,6,6-tetramethyl-4-hydroxypiperidino, N-methylpiperidin-4-yl,

- 5 N-(tert-butoxycarbonyl)piperidin-4-yl, N-acetylpiperidin-4-yl, N-methylsulfonylpiperidin-4-yl, piperazinyl, 4-methylpiperazinyl, 4-methylsulfonylpiperazinyl, morpholinyl, thiomorpholinyl, 1-oxothiomorpholin-4-yl, 1,1-dioxothiomorpholin-4-yl, tetrahydropyranyl, quinolyl, isoquinolyl, quinazolinyl,
- 10 quinoxalyl, phthalazinyl, cinnolinyl, naphthyridinyl, 5,6,7,8tetrahydroquinolyl, indolyl, benzimidazolyl, indolinyl, benzofuranyl, benzothienyl, benzoxazolyl, benzothiazolyl,

15

$$-N \longrightarrow 0 \qquad -N \longrightarrow S = 0 \qquad -N \longrightarrow S \lesssim 0$$

$$-N \longrightarrow Me \qquad N \longrightarrow Me \qquad N$$

5 and the like.

The heterocyclic moiety is preferably a heterocyclic group which is a 5-membered or a 6-membered monocyclic group. Examples thereof include pyridyl, pyrazinyl, pyrimidinyl, pyridazinyl, 1,3,5-triazinyl, pyrrolyl, pyrazolyl, imidazolyl, 1,2,4-triazolyl, tetrazolyl, thienyl, furyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl, thiadiazolyl, pyrrolidinyl, piperidyl, piperazinyl, morpholinyl, thiomorpholinyl and tetrahydropyranyl, and the group B here is preferably the above-defined halogen atom, the above-defined C1-6 alkyl, the above-defined halogenated C1-6 alkyl, the above-defined 15 C1-6 alkanoyl, -(CH2)r-COOR^{b1}, -(CH2)r-CONR^{b1}R^{b2} or -(CH2)r-OR^{b1}.

Examples of heterocyclic group optionally substituted by 1 to 5 substituent(s) selected from group B preferably include piperidino, 4-methylpiperidino, 2,6-dimethylpiperidino, 4-hydroxypiperidino, 1-piperazinyl, 1-(methylsulfonyl)piperidin-4-yl, 1-pyrrolidinyl, morpholino, 4-thiomorpholinyl, tetrahydropyranyl, pyridyl, thiazolyl,

Particularly preferably, it is piperidino, 4methylpiperidino, 2,6-dimethylpiperidino, 4-hydroxypiperidino, 1piperazinyl, 1-pyrrolidinyl, morpholino or 4-thiomorpholinyl at
R^{a18}, tetrahydropyranyl or 4-hydroxypiperidino at R^{a20}, piperidino,
4-hydroxypiperidino or 3,4-dihydroxypiperidino at R^{a21}, pyridyl or
morpholino at R^{a24}, pyridyl or 4-hydroxypiperidino at R^{a25}, pyridyl
or thiazolyl at R^{a26} and at R^{a27} and R^{a28}, it is 1(methylsulfonyl)piperidin-4-yl, 3-hydroxypyrrolidinyl, 3hydroxypiperidino, 4-hydroxypiperidino, 3,4-dihydroxypiperidino,
4-methoxypiperidino, 4-carboxypiperidino, 4-

(hydroxymethyl)piperidino, 2-oxopiperidino, 4-oxopiperidino, 2,2,6,6-tetramethylpiperidino, 2,2,6,6-tetramethyl-4-hydroxypiperidino, 4-methylsulfonylpiperazinyl, 1-oxothiomorpholin-4-yl or 1,1-dioxothiomorpholin-4-yl, and 2-oxazolin-2-yl at R^{a22} and R^{a23}.

20

The heterocyclic group optionally substituted by 1 to 5 substituent(s) selected from group D is that wherein the above-defined heterocyclic group is optionally substituted by 1 to 5

substituent(s), and includes unsubstituted heterocyclic group.

The substituent(s) is(are) selected from the substituent(s) of the above-mentioned group D (substituents shown under (a) to (g)).

Examples of the group D here include the substituent(s) 5 exemplified for C₆₋₁₄ aryl optionally substituted by 1 to 5 substituent(s) selected from group D.

Examples of heterocyclic group optionally substituted by 1 to 5 substituent(s) selected from group D include 2-pyridyl, 3pyridyl, 4-pyridyl, 3-fluoropyridin-4-yl, 3-chloropyridin-4-yl, 10 4-chloropyridin-3-yl, pyrazinyl, pyrimidinyl, pyridazinyl, 1,3,5triazinyl, pyrrolyl, pyrazolyl, imidazolyl, 1,2,4-triazolyl, tetrazolyl, 2-thienyl, 3-thienyl, furyl, oxazolyl, 2methyloxazol-4-yl, isoxazolyl, thiazolyl, 2-methylthiazol-4-yl, 2,5-dimethylthiazol-4-yl, 2,4-dimethylthiazol-5-yl, isothiazolyl, 15 thiadiazolyl, pyrrolinyl, pyrrolidinyl, imidazolidinyl, piperidyl, N-methylpiperidin-4-yl, N-(tert-butoxycarbonyl)piperidin-4-yl, Nacetylpiperidin-4-yl, N-methylsulfonylpiperidin-4-yl, piperazinyl, morpholinyl, thiomorpholinyl, tetrahydropyranyl, quinolyl, isoquinolyl, quinazolinyl, quinoxalyl, phthalazinyl, cinnolinyl, 20 naphthyridinyl, 5,6,7,8-tetrahydroquinolyl, indolyl, benzimidazolyl, indolinyl, benzofuranyl, benzothienyl, benzoxazolyl, benzothiazolyl

$$-N \longrightarrow 0 \qquad -N \longrightarrow S = 0 \qquad -N \longrightarrow S \leqslant_0^0$$

25

and the like.

In addition, the heterocyclic group may be substituted at the 3-, 4-, 5- or 6-position of 2-pyridyl, at the 2-, 4-, 5- or 5-position of 3-pyridyl, at the 2-, 3-, 5- or 6-position of 4-pyridyl, at the 3-, 4- or 5-position of 2-thienyl, or at the 2-, 4- or 5-position of 3-thienyl, by fluorine atom, chlorine atom, bromine atom, nitro, methyl, tert-butyl, carboxyl, trifluoromethyl, hydroxymethyl, methoxymethyl, 2-carboxylethyl, methoxy, carbamoyl, methylthio, dimethylaminocarbonyl, methylsulfonyl, amino or acetylamino.

At Z and Z', the heterocyclic moiety is preferably a heterocyclic group which is a 5-membered or 6-membered monocyclic group. Examples thereof include pyridyl, pyrazinyl, pyrimidinyl, pyridazinyl, 1,3,5-triazinyl, pyrrolyl, 2-oxopyrrolidinyl, 2-oxopiperidyl, pyrazolyl, imidazolyl, 2-imidazolinyl, 2-oxoimidazolidinyl, 1,2,4-triazolyl, tetrazolyl, thienyl, furyl, oxazolyl, isoxazolyl, 2-oxazolinyl, thiazolyl, isothiazolyl, 1,1-dioxoisothiazolidinyl, thiadiazolyl, pyrrolidinyl, piperidyl, piperazinyl, morpholinyl, thiomorpholinyl, tetrahydropyranyl, Δ^2 -1,2,4-oxadiazolyl, 5-oxo- Δ^2 -1,2,4-oxadiazolyl, 5-oxo- Δ^2 -1,2,4-thiadiazolinyl and 2-oxo-3H-1,2,3,5-oxathiadiazolinyl. The group D here is preferably the above-defined halogen atom, nitro, the above-defined optionally substituted C_{1-6} alkyl, $-(CH_2)_t-COOR^{a19}, -(CH_2)_t-CONR^{a27}R^{a28}, -(CH_2)_t-OR^{a20}, -(CH_2)_t-NR^{a29}CO-R^{a24}, -(CH_2)_t-S(O)_q-R^{a25}$ or $-(CH_2)_t-SO_2-NHR^{a26}$.

Examples of heterocyclic group optionally substituted by 1 to 5 substituent(s) selected from group D preferably include piperidino, 4-hydroxypiperidino, 2-oxopiperidin-1-yl, 1-30 piperazinyl, 1-pyrrolidinyl, 2-oxopyrrolidin-1-yl, morpholino, 4-thiomorpholinyl, 4-tetrahydropyranyl, 3-pyridyl, 2-pyrimidinyl, 2-imidazolin-2-yl, 2-oxoimidazolidin-1-yl, 2-oxooxazolidin-1-yl,

5-tetrazolyl, 2-thiazolyl, 4-thiazolyl, 5-thiazolyl, 2-methylthiazol-4-yl, 5-methylthiazol-2-yl, 2-aminothiazol-4-yl, 3-methyl-1,2,4-oxadiazol-5-yl, 1,1-dioxoisothiazolidin-2-yl, 4,4-dimethyl- Δ^2 -oxazolin-2-yl, 2-thienyl, 5-chlorothiophen-2-yl, 5-methyloxazol-2-yl, 5-oxo- Δ^2 -1,2,4-oxadiazolin-3-yl, 5-oxo- Δ^2 -1,2,4-thiadiazolin-3-yl and 2-oxo-3H-1,2,3,5-oxathiazolin-4-yl.

Particularly preferably, it is pyridyl, pyrimidinyl, tetrazolyl, thienyl, piperidyl, 2-oxopiperidin-1-yl, 2-oxopyrrolidin-1-yl, 2-imidazolin-2-yl, 2-oxoimidazolidin-1-yl, 2-oxooxazolidin-1-yl, 2-methylthiazol-4-yl, 5-methylthiazol-2-yl, 2-aminothiazol-4-yl, 3-methyl-1,2,4-oxadiazol-5-yl, 1,1-dioxoisothiazolidin-2-yl, 4,4-dimethyl-Δ²-oxazolin-2-yl, 5-chlorothiophen-2-yl, 5-methyloxazol-2-yl, 5-oxo-Δ²-1,2,4-oxadiazolin-3-yl, 5-oxo-Δ²-1,2,4-thiadiazolin-3-yl or 2-oxo-3H-15 1,2,3,5-oxathiadiazolin-4-yl, more preferably 2-oxopiperidin-1-yl, 2-oxopyrrolidin-1-yl, 2-oxoimidazolidin-1-yl, 2-oxooxazolidin-1-yl or 1,1-dioxoisothiazolidin-2-yl, most preferably 2-oxopyrrolidin-1-yl.

The C₃₋₈ cycloalkyl optionally substituted by 1 to 5
substituent(s) selected from group C is that wherein the abovedefined C₃₋₈ cycloalkyl is optionally substituted by the 1 to 5
substituent(s) selected from hydroxyl group, the above-defined
halogen atom, the above-defined C₁₋₆ alkyl and the above-defined
C₁₋₆ alkoxy, which may be unsubstituted. Examples thereof include
cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cycloheptyl, 4fluorocyclohexyl, 2-methylcyclopentyl, 3-methylcyclohexyl, 4methylcyclohexyl, 4,4-dimethylcyclohexyl, 3,5-dimethylcyclohexyl,
4-tert-butylcyclohexyl, 4-hydroxycyclohexyl, 4-methoxycyclohexyl
and 2,3,4,5,6-pentafluorocyclohexyl.

The cycloalkyl moiety is preferably cyclopentyl or cyclohexyl, particularly preferably cyclohexyl.

30

At the ring Cy and ring Cy', the C₃₋₈ cycloalkyl optionally substituted by 1 to 5 substituent(s) selected from group C is preferably cyclopentyl, cyclohexyl, 4-fluorocyclohexyl, 435 methylcyclohexyl, 4,4-dimethylcyclohexyl, 4-tert-butylcyclohexyl, 4-hydroxycyclohexyl or 4-methoxycyclohexyl, more preferably cyclopentyl or cyclohexyl, particularly preferably cyclohexyl.

The C3-8 cycloalkyl optionally substituted by 1 to 5

substituent(s) selected from the above group B is that wherein the above-defined C_{3-8} cycloalkyl is optionally substituted by 1 to 5 substituent(s), and includes unsubstituted cycloalkyl. The substituents are selected from the above group B.

Specific examples thereof include cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, d-fluorocyclohexyl, 2-methylcyclopentyl, 3-methylcyclohexyl, 4-methylcyclohexyl, 4,4-dimethylcyclohexyl, 3,5-dimethylcyclohexyl, 4-tert-butylcyclohexyl, 4-hydroxycyclohexyl, 4-methoxycyclohexyl and 2,3,4,5,6-pentafluorocyclohexyl.

Also exemplified are those wherein cyclopentyl or cyclohexyl is substituted by fluorine atom, chlorine atom, bromine atom, nitro, methyl, tert-butyl, carboxyl, trifluoromethyl, hydroxymethyl, methoxymethyl, 2-carboxylethyl, methoxy, carbamoyl, methylthio, dimethylaminocarbonyl, methylsulfonyl or acetylamino.

At cycloalkyl moiety, it is preferably cyclopropyl, cyclobutyl, cyclopentyl or cyclohexyl. As the C₃₋₈ cycloalkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B, it is particularly preferably cyclopropyl, cyclobutyl, cyclohexyl or 4-hydroxycyclohexyl at R^{a27} and R^{a28}.

The C_{3-8} cycloalkyl optionally substituted by 1 to 5 substituent(s) selected from group D is that wherein the above-defined C_{3-8} cycloalkyl is optionally substituted by 1 to 5 substituent(s), and includes unsubstituted cycloalkyl. The substituent(s) is(are) selected from the substituent(s) of the above-mentioned group D (substituents shown under (a) to (q)).

The group D here includes the substituents recited with regard to C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from group D.

Examples thereof include cyclopropyl, cyclobutyl, cyclopentyl, cyclohexyl, cycloheptyl, 4-fluorocyclohexyl, 2-methylcyclopentyl, 3-methylcyclohexyl, 4-methylcyclohexyl, 4,4-dimethylcyclohexyl, 3,5-dimethylcyclohexyl, 4-tert-butylcyclohexyl, 4-hydroxycyclohexyl, 4-methoxycyclohexyl and

2,3,4,5,6-pentafluorocyclohexyl.

The group D may be, for example, cyclopentyl or cyclohexyl substituted by fluorine atom, chlorine atom, bromine atom, nitro,

methyl, tert-butyl, carboxyl, trifluoromethyl, hydroxymethyl, methoxymethyl, 2-carboxylethyl, methoxy, carbamoyl, methylthio, dimethylaminocarbonyl, methylsulfonyl or acetylamino.

The cycloalkyl moiety is preferably cyclopentyl or 5 cyclohexyl, and at Z and Z', it is particularly preferably cyclohexyl.

The optionally substituted C₃₋₈ cycloalkenyl is that wherein the above-defined C₃₋₈ cycloalkenyl is optionally substituted by substituent(s) selected from hydroxyl group, the above-defined halogen atom, the above-defined C₁₋₆ alkyl and the above-defined C₁₋₆ alkoxy, which may be unsubstituted. Examples thereof include cyclopropenyl, cyclobutenyl, cyclopentenyl, cyclopentadienyl, cyclohexenyl, 4-fluoro-2-cyclohexenyl, 4-methyl-2-cyclohexenyl, 4-methyl-3-cyclohexenyl, 2,4
15 cyclohexadien-1-yl, 2,5-cyclohexadien-1-yl, cycloheptenyl and cyclooctenyl and the like, but do not include aryl (e.g., phenyl) or completely saturated cycloalkyl.

The optionally substituted $C_{3-\theta}$ cycloalkenyl is particularly preferably cyclohexenyl at the ring Cy.

20

The C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from group B is that wherein the above-defined C_{6-14} aryl C_{1-6} alkyl is optionally substituted by 1 to 5 substituent(s), and includes unsubstituted arylalkyl. The substituent(s) is(are) selected from the above-mentioned group B.

Examples thereof include benzyl, 1-naphthylmethyl, 2naphthylmethyl, phenethyl, 3-phenylpropyl, 2-phenylpropyl, 3fluorobenzyl, 4-fluorobenzyl, 3-chlorobenzyl, 4-chlorobenzyl,
2,4-dichlorobenzyl, 3,5-dichlorobenzyl, pentafluorobenzyl, 4methylbenzyl, 4-tert-butylbenzyl, 2-trifluoromethylbenzyl, 4so trifluoromethylbenzyl, 4-nitrobenzyl, 4-cyanobenzyl, 4acetylbenzyl, 4-carboxylbenzyl, 4-carbamoylbenzyl, 4-aminobenzyl,
4-dimethylaminobenzyl, 4-acetylaminobenzyl, 4(methylsulfonylamino)benzyl, 4-methoxybenzyl, 3,4,5trimethoxybenzyl, 4-methylthiobenzyl, 4-methylsulfonylbenzyl, 4sminosulfonylbenzyl, 3-nitro-4-methoxybenzyl and 4-nitro-3methoxybenzyl.

The C_{6-14} aryl C_{1-6} alkyl moiety is preferably benzyl or phenethyl, particularly preferably benzyl. The group B is

preferably the above-defined halogen atom, nitro, the above-defined C_{1-6} alkyl, the above-defined halogenated C_{1-6} alkyl or $-(CH_2)_r-OR^{b1}$. Examples thereof include fluorine atom, chlorine atom, nitro, methyl, tert-butyl, trifluoromethyl, methoxy or trifluoromethyloxy, particularly preferably fluorine atom or chlorine atom.

The specific C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from group B at R^{a12} and R^{a13} is preferably benzyl, phenethyl, 3-chlorobenzyl, 4-chlorobenzyl, 4-10 tert-butylbenzyl or 3-trifluoromethylbenzyl, it is preferably benzyl at R^{a1} , R^{a19} , R^{a27} , R^{a28} , R^{a31} and R^{b5} , it is preferably benzyl, phenethyl, 4-fluorobenzyl, 2-chlorobenzyl, 3-chlorobenzyl, 4-chlorobenzyl, 4-tert-butylbenzyl or 4-trifluoromethylbenzyl at R^{a20} , and 4-chlorobenzyl, 3,5-dichlorobenzyl or 4-trifluoromethylbenzyl at R^{a22} and R^{a23} .

It is particularly preferably benzyl at other substituents.

The C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from group D is that wherein the above-defined C_{6-14} aryl C_{1-6} alkyl is optionally substituted by 1 to 5 substituent(s), and includes unsubstituted aryl. The substituent(s) is(are) selected from the substituent(s) of the above-mentioned group D (substituents shown under (a) to (q)).

Examples of group D include fluorine atom, chlorine atom, bromine atom, nitro, cyano, methyl, ethyl, propyl, isopropyl,

tert-butyl, trifluoromethyl, hydroxymethyl, 2-hydroxyethyl,
methoxymethyl, 2-carboxylethyl, methoxycarbonylmethyl,
ethoxycarbonylmethyl, acetyl, carboxyl, methoxycarbonyl,
ethoxycarbonyl, carbamoyl, methylaminocarbonyl,
isopropylaminocarbonyl, dimethylaminocarbonyl,
diethylaminocarbonyl, (2-hydroxyethyl)aminocarbonyl,
(carboxylmethyl)aminocarbonyl, hydroxyl group, methoxy, ethoxy,
isopropyloxy, hydroxymethyloxy, carboxylmethyloxy,
(dimethylaminocarbonyl)methyloxy, amino, methylamino,
dimethylamino, diethylamino, acetylamino, methylsulfonylamino,
methylthio, methylsulfonyl, methylsulfinyl, aminosulfonyl,
methylaminosulfonyl and dimethylaminosulfonyl.

Examples of C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from group D include benzyl, 1-

naphthylmethyl, 2-naphthylmethyl, phenethyl, 3-phenylpropyl, 2-phenylpropyl, 3-fluorobenzyl, 4-fluorobenzyl, 3-chlorobenzyl, 4-chlorobenzyl, 2,4-dichlorobenzyl, 3,5-dichlorobenzyl, 4-bromobenzyl, 4-nitrobenzyl, pentafluorobenzyl, 4-methylbenzyl, 4-tert-butylbenzyl, 2-trifluoromethylbenzyl, 4
trifluoromethylbenzyl, 4-(hydroxymethyl)benzyl, 4-(methoxymethyl)benzyl, 4-(2-carboxylethyl)benzyl, 3-carboxylbenzyl, 4-carboxylbenzyl, 4-methoxybenzyl, 3,4,5-trimethoxybenzyl, 4-carbamoylbenzyl, 4-methylthiobenzyl, 4
(dimethylaminocarbonyl)benzyl, 4-methylsulfonylbenzyl, 4-(acetylamino)benzyl, 4-cyanobenzyl, 4-acetylbenzyl, 4-aminobenzyl, 4-dimethylaminobenzyl, 4-(methylsulfonylamino)benzyl, 4-methylsulfinylbenzyl, 4-aminosulfonylbenzyl, (3-nitro-4-methoxyphenyl)methyl and (4-nitro-3-methoxyphenyl)methyl.

At Z and Z', the C_{6-14} aryl C_{1-6} alkyl moiety is preferably benzyl or phenethyl, and the group D here is preferably the above-defined halogen atom, nitro, the above-defined optionally substituted C_{1-6} alkyl, $-(CH_2)_t-COOR^{a19}$, $-(CH_2)_t-CONR^{a27}R^{a28}$, $-(CH_2)_t-OR^{a20}$, $-(CH_2)_t-NR^{a29}CO-R^{a24}$, $-(CH_2)_t-S(O)_q-R^{a25}$ or $-(CH_2)_t-SO_2-NHR^{a26}$.

The C₆₋₁₄ aryl C₁₋₆ alkyl optionally substituted by 1 to 5 substituent(s) selected from group D is preferably benzyl, 3-fluorobenzyl, 4-fluorobenzyl, 3-chlorobenzyl, 4-chlorobenzyl, 3,5-dichlorobenzyl, 4-bromobenzyl, 4-nitrobenzyl, 4-methylbenzyl, 4-tert-butylbenzyl, 2-trifluoromethylbenzyl, 4-trifluoromethylbenzyl, 4-(hydroxymethyl)benzyl, 4-(methoxymethyl)benzyl, 4-(2-carboxylethyl)benzyl, 3-carboxylbenzyl, 4-carboxylbenzyl, 4-methoxybenzyl, 3,4,5-trimethoxybenzyl, 4-carbamoylbenzyl, 4-methylthiobenzyl, 4-sacetylaminocarbonyl)benzyl, 4-methylsulfonylbenzyl, 4-acetylaminobenzyl, 4-methylsulfonylbenzyl, 4-amethylsulfonylbenzyl, 4-amet

It is particularly preferably the above-defined halogen atom, the above-defined optionally substituted C_{1-6} alkyl, $-(CH_2)_t - COOR^{a19}, -(CH_2)_t - CONR^{a27}R^{a28}, -(CH_2)_t - OR^{a20} \text{ or } -(CH_2)_t - S(0)_q - R^{a25}.$ Examples thereof include fluorine atom, chlorine atom, bromine atom, nitro, methyl, tert-butyl, carboxyl, trifluoromethyl, hydroxymethyl, methoxymethyl, 2-carboxylethyl, methoxy, carbamoyl,

methylthio, dimethylaminocarbonyl, methylsulfonyl and acetylamino. It is more preferably fluorine atom, chlorine atom, methyl, tertbutyl, carboxyl, methoxy, carbamoyl, methylthio, dimethylaminocarbonyl or methylsulfonyl, most preferably fluorine atom or chlorine atom.

The heterocycle C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from group B is that wherein the above-defined heterocycle C_{1-6} alkyl is optionally substituted by 1 to 5 substituent(s), and includes unsubstituted heterocycle C_{1-6} alkyl.

The substituent(s) is(are) selected from the above-mentioned group B.

Examples thereof include 2-pyridylmethyl, 3-pyridylmethyl, 2-chloropyridin-4-ylmethyl, 4-pyridylmethyl, pyrrolylmethyl, imidazolylmethyl, 2-thienylmethyl, 3-thienylmethyl, 2-furylmethyl, 15 2-oxazolylmethyl, 5-isothiazolylmethyl, 2-methyloxazol-4-ylmethyl, 2-thiazolylmethyl, 4-thiazolylmethyl, 5-thiazolylmethyl, 2methylthiazol-4-ylmethyl, 2-methylthiazol-5-ylmethyl, 2,5dimethylthiazol-4-ylmethyl, 4-methylthiazol-2-ylmethyl, 2,4dimethylthiazol-5-ylmethyl, 2-isothiazolylmethyl, 2-20 pyrrolinylmethyl, pyrrolidinylmethyl, piperidylmethyl, 4piperidylmethyl, 1-methylpiperidin-4-ylmethyl, 4hydroxypiperidinomethyl, 3-hydroxypyrrolidinylmethyl, 2-(4hydroxypiperidino) ethyl, 1-(tert-butoxycarbonyl) piperidin-4ylmethyl, 1-acetylpiperidin-4-ylmethyl, 1-25 methylsulfonylpiperidin-4-ylmethyl, piperazinylmethyl, morpholinomethyl, thiomorpholinylmethyl, 1tetrahydropyranylmethyl, 2-quinolylmethyl, 1-isoquinolylmethyl and the like.

The heterocyclic moiety is preferably a heterocyclic group

30 which is a 5-membered or 6-membered monocyclic group. Examples
thereof include pyridyl, pyrazinyl, pyrimidinyl, pyridazinyl,

1,3,5-triazinyl, pyrrolyl, pyrazolyl, imidazolyl, 1,2,4-triazolyl,
tetrazolyl, thienyl, furyl, oxazolyl, isoxazolyl, thiazolyl,
isothiazolyl, thiadiazolyl, pyrrolidinyl, piperidyl, piperazinyl,

35 morpholinyl, thiomorpholinyl and tetrahydropyranyl, and the alkyl
moiety thereof is preferably straight chain alkyl having 1 to 4
carbon atoms. The group B here is preferably the above-defined

halogen atom, the above-defined C_{1-6} alkyl, the above-defined halogenated C_{1-6} alkyl, the above-defined C_{1-6} alkanoyl, $-(CH_2)_r-COOR^{bl}$, $-(CH_2)_r-CONR^{bl}R^{b2}$ or $-(CH_2)_r-OR^{bl}$.

Examples of heterocycle C_{1-6} alkyl optionally substituted 5 by 1 to 5 substituent(s) selected from group B preferably include 2-pyridylmethyl, 3-pyridylmethyl, 2-chloropyridin-4-ylmethyl, 4pyridylmethyl, piperidin-4-ylmethyl, 1-methylpiperidin-4-ylmethyl, 2-(4-hydroxypiperidino)ethyl, 1-acetylpiperidin-4-ylmethyl, 1-(tert-butoxycarbonyl)piperidin-4-ylmethyl, 1-(methylsulfonyl)-10 piperidin-4-ylmethyl, 2-thiazolylmethyl, 4-thiazolylmethyl, 2methylthiazolin-4-ylmethyl, 2,4-dimethylthiazolin-5-ylmethyl and 4-methylthiazol-2-ylmethyl. Particularly preferably, it is 2pyridylmethyl, 3-pyridylmethyl, 2-chloropyridin-4-ylmethyl, 4pyridylmethyl, piperidin-4-ylmethyl, 1-methylpiperidin-4-ylmethyl, 15 2-(4-hydroxypiperidino) ethyl, 1-acetylpiperidin-4-ylmethyl, 1-(tert-butoxycarbonyl)piperidin-4-ylmethyl, 1-(methylsulfonyl)piperidin-4-ylmethyl, 2-methylthiazolin-4ylmethyl, 2,4-dimethylthiazolin-5-ylmethyl or 4-methylthiazol-2ylmethyl at R^{a20} , 2-pyridylmethyl at R^{a22} and R^{a23} , and 4-20 pyridylmethyl or 4-methylthiazol-2-ylmethyl at R^{a27} and R^{a28} .

The heterocycle C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from group D is that wherein the above-defined heterocycle C_{1-6} alkyl is optionally substituted by 1 to 5 substituent(s), and includes unsubstituted heterocycle C_{1-6} alkyl.

25 The substituent(s) is(are) selected from the above-mentioned group D (substituents shown under (a) to (q)).

Examples of group D here include fluorine atom, chlorine atom, bromine atom, nitro, cyano, methyl, ethyl, propyl, isopropyl, tert-butyl, trifluoromethyl, hydroxymethyl, 2-30 hydroxyethyl, methoxycarbonylmethyl, 2-carboxylethyl, methoxycarbonylmethyl, ethoxycarbonylmethyl, acetyl, carboxyl, methoxycarbonyl, ethoxycarbonyl, carbamoyl, methylaminocarbonyl, isopropylaminocarbonyl, dimethylaminocarbonyl, diethylaminocarbonyl, (2-hydroxyethyl)aminocarbonyl, diethylaminocarbonyl, hydroxyl group, methoxy, ethoxy, isopropyloxy, hydroxymethyloxy, carboxylmethyloxy, (dimethylaminocarbonyl)methyloxy, amino, methylamino, diethylamino, diethylamino, acetylamino, methylsulfonylamino,

methylthio, methylsulfonyl, methylsulfinyl, aminosulfonyl, methylaminosulfonyl and dimethylaminosulfonyl.

Examples of heterocycle C₁₋₆ alkyl optionally substituted by 1 to 5 substituent(s) selected from group D include 2-5 pyridylmethyl, 3-pyridylmethyl, 2-chloropyridin-4-ylmethyl, 4pyridylmethyl, pyrrolylmethyl, imidazolylmethyl, 2-thienylmethyl, 3-thienylmethyl, 2-furylmethyl, 2-oxazolylmethyl, 5isothiazolylmethyl, 2-methyloxazol-4-ylmethyl, 2-thiazolylmethyl, 4-thiazolylmethyl, 5-thiazolylmethyl, 2-methylthiazol-4-ylmethyl, 10 2-methylthiazol-5-ylmethyl, 2,5-dimethylthiazol-4-ylmethyl, 4methylthiazol-2-ylmethyl, 2,4-dimethylthiazol-5-ylmethyl, 2isothiazolylmethyl, 2-pyrrolinylmethyl, pyrrolidinylmethyl, piperidylmethyl, 4-piperidylmethyl, 1-methylpiperidin-4-ylmethyl, 4-hydroxypiperidinomethyl, 2-(4-hydroxypiperidino)ethyl, 1-(tert-15 butoxycarbonyl)piperidin-4-ylmethyl, 1-acetylpiperidin-4-ylmethyl, 1-methylsulfonylpiperidin-4-ylmethyl, piperazinylmethyl, morpholinomethyl, thiomorpholinylmethyl, 1tetrahydropyranylmethyl, 2-quinolylmethyl, 1-isoquinolylmethyl, and the like.

20 Preferable heterocyclic moiety at Z and Z' is heterocylic group which is 5-membered or 6-membered monocyclic group.

Examples of the heterocyclic moiety include pyridyl, pyrazinyl, pyrimidinyl, pyridazinyl, 1,3,5-triazinyl, pyrrolyl, pyrazolyl, imidazolyl, 1,2,4-triazolyl, tetrazolyl, thienyl, furyl, oxazolyl, isooxazolyl, thiazolyl, isothiazolyl, thiadiazolyl, pyrrolidinyl, piperidyl, piperazinyl, morpholinyl, thiomorpholinyl and tetrahydropyranyl, and the alkyl moiety is preferably straight chain alkyl having 1 to 4 carbon atoms, particularly methyl (i.e., methylene).

Preferable group D is the above-defined halogen atom, nitro, the above-defined optionally substituted C_{1-6} alkyl, - $(CH_2)_t$ - $COOR^{a19}$, - $(CH_2)_t$ - $CONR^{a27}R^{a28}$, - $(CH_2)_t$ - OR^{a20} , - $(CH_2)_t$ - $NR^{a29}CO-R^{a24}$, - $(CH_2)_t$ - $S(O)_g$ - R^{a25} or - $(CH_2)_t$ - SO_2 - NHR^{a26} .

Preferable examples of heterocycle C₁₋₆ alkyl optionally substituted by 1 to 5 substituent(s) selected from group D include 2-pyridylmethyl, 3-pyridylmethyl, 2-chloropyridin-4-ylmethyl, 4-pyridylmethyl, piperidin-4-ylmethyl, 1-methylpiperidin-4-ylmethyl, 4-hydroxypiperidinomethyl, 2-(4-

hydroxypiperidino) ethyl, 1-acetylpiperidin-4-ylmethyl, 1-(tert-butoxycarbonyl) piperidin-4-ylmethyl, 1-(methylsulfonyl) piperidin-4-ylmethyl, 2-thiazolylmethyl, 4-thiazolylmethyl, 2-methylthiazolin-4-ylmethyl, 2,4-dimethylthiazolin-5-ylmethyl and 4-methylthiazol-2-ylmethyl.

Particularly preferred is 4-hydroxypiperidinomethyl.

The C_{3-8} cycloalkyl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B is that wherein the above-defined C_{3-8} cycloalkyl C_{1-6} alkyl is optionally substituted by 1 to 5 substituent(s), and includes unsubstituted cycloalkylalkyl. The substituents are selected from the above group B.

Specific examples thereof include cyclopropylmethyl, cyclobutylmethyl, cyclopentylmethyl, cyclohexylmethyl, 2
15 (cyclopentyl)ethyl, 2-(cyclohexyl)ethyl, cycloheptylmethyl, 4
fluorocyclohexylmethyl, 2-methylcyclopentylmethyl, 3
methylcyclohexylmethyl, 4-methylcyclohexylmethyl, 4,4
dimethylcyclohexylmethyl, 3,5-dimethylcyclohexylmethyl, 4-tert
butylcyclohexylmethyl, 4-hydroxycyclohexylmethyl, 4
20 methoxycyclohexylmethyl and 2,3,4,5,6-pentafluorocyclohexylmethyl.

Also exemplified are those wherein cyclopentylmethyl or cyclohexylmethyl is substituted by fluorine atom, chlorine atom, bromine atom, nito, methyl, tert-butyl, carboxyl, trifluoromethyl, hydroxymethyl, methoxymethyl, 2-carboxylethyl, methoxy, carbamoyl, methylthio, dimethylaminocarbonyl, methylsulfonyl or acetylamino.

At C_{3-8} cycloalkyl C_{1-6} alkyl moiety, it is preferably cyclopentylmethyl or cyclohexylmethyl, and at R^{a20} , R^{a27} and R^{a28} , it is particularly preferably cyclohexylmethyl.

The carboxyl-protecting group only needs to be suitable

for reaction conditions, and is capable of protecting and
deprotecting and may be, for example, methyl; substituted methyl
group such as methoxymethyl, methylthiomethyl, 2tetrahydropyranyl, methoxyethoxymethyl, benzyloxymethyl, phenacyl,
diacylmethyl, phthalimidomethyl etc.; ethyl; substituted ethyl

group such as 2,2,2-trichloroethyl, 2-chloroethyl, 2(trimethylsilyl)ethyl, 2-methylthioethyl, 2-(ptoluenesulfonyl)ethyl, t-butyl etc.; benzyl; substituted benzyl
group such as diphenylmethyl, triphenylmethyl, p-nitrobenzyl, 4-

picolyl, p-methoxybenzyl, 2-(9,10-dioxo)anthrylmethyl etc.; silyl group such as trimethylsilyl, t-butyldimethylsilyl, phenyldimethylsilyl etc.; and the like.

Preferred are industrially effective protecting groups and $\it 5$ specifically preferred as R^{a36} are methyl and ethyl.

In formula [I], X is preferably

10 wherein each symbol is as defined above.

 G^1 , G^2 , G^3 and G^4 are each preferably $(C-R^1)$, $(C-R^2)$, $(C-R^3)$ and $(C-R^4)$, G^5 is preferably a nitrogen atom, and G^6 , G^8 and G^9 are preferably a carbon atom. G^7 is preferably $C(-R^7)$ or unsubstituted nitrogen atom, wherein R^7 is preferably hydrogen atom.

A preferable combination is G^2 of $(C-R^2)$ and G^6 of a carbon atom, particularly preferably G^2 of $(C-R^2)$, G^6 of a carbon atom and G^5 of a nitrogen atom, most preferably G^2 of $(C-R^2)$, G^6 of a carbon atom, G^5 of a nitrogen atom and G^7 of unsubstituted 20 nitrogen atom.

In formulas [I] and [II], 1 to 4 of G^1 to G^9 in the moiety

is(are) preferably a nitrogen atom, specifically preferably

more preferably

$$R^2$$
 R^3
 R^4
or
 R^3
 R^4

most preferably

5

$$R^2$$
 R^3
 R^4

It is also a preferable embodiment wherein the

$$G^{2}$$
, G^{3} , G^{4} , G^{9} molety is aromatic ring.

R¹ and R³ are preferably hydrogen atom or -OR^{a6} (R^{a6} is as defined above), particularly preferably hydrogen atom. R² is preferably carboxyl, -COOR^{a1}, -CONR^{a2}R^{a3}, -SO₂R^{a7} (each symbol is as defined above) or heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom, particularly preferably carboxyl, -COOR^{a1} or -SO₂R^{a7}, more preferably carboxyl or -COOR^{a1}, most preferably carboxyl. R⁴ is preferably hydrogen atom.

 R^{a1} is preferably optionally substituted C_{1-6} alkyl.

When R^2 is carboxyl or $-COOR^{a1}$, at least one of R^1 , R^3 and R^4 is preferably hydroxyl group, halogen atom (particularly fluorine atom, chlorine atom) or $-OR^{a6}$ (wherein R^{a6} is preferably hydrogen atom or methyl).

The ring Cy and ring Cy' are preferably cyclopentyl, cyclohexyl, cycloheptyl, tetrahydrothiopyranyl or piperidino, particularly preferably cyclopentyl, cyclohexyl or cycloheptyl, more preferably cyclohexyl.

The ring A and ring A' are preferably phenyl, pyridyl, pyrazinyl, pyrimidinyl, pyridazinyl, cyclohexyl, cyclohexenyl, furyl or thienyl, particularly preferably phenyl, pyridyl, pyrazinyl, pyrimidinyl or pyridazinyl, more preferably phenyl or pyridyl, and most preferably phenyl.

The ring B and ring B' are preferably C₁₋₆ aryl or heterocyclic group, specifically preferably, phenyl, pyridyl, pyrazinyl, pyrimidinyl, pyridazinyl, 1,3,5-triazinyl, pyrrolyl, pyrazolyl, imidazolyl, 1,2,4-triazolyl, tetrazolyl, thienyl, furyl, oxazolyl, isoxazolyl, thiazolyl, isothiazolyl or

thiadiazolyl, particularly preferably phenyl, pyridyl, pyrimidinyl, 1,3,5-triazinyl or thiazolyl, more preferably, phenyl, pyridyl or thiazolyl, and most preferably phenyl or thiazolyl.

With regard to R^5 and R^6 , one of them is preferably hydrogen atom and the other is halogen atom, particularly fluorine atom. Alternatively, the both are preferably hydrogen atoms. When ring A is phenyl, R^5 and R^6 preferably are present at an ortho position from G^6 . The same applies to R^5 , and R^6 .

Y is preferably $-(CH_2)_m-O-(CH_2)_n-$, $-NHCO_2-$, $-CONH-CHR^{a14}-$, $-(CH_2)_m-NR^{a12}-(CH_2)_n-$, $-CONR^{a13}-(CH_2)_n-$, $-O-(CH_2)_m-CR^{a15}R^{a16}-(CH_2)_n-$ or $-(CH_2)_n-NR^{a12}-CHR^{a15}-$ (each symbol is as defined above), more preferably, $-(CH_2)_m-O-(CH_2)_n-$ or $-O-(CH_2)_m-CR^{a15}R^{a16}-(CH_2)_n-$, most preferably $-(CH_2)_m-O-(CH_2)_n-$.

The 1, m and n are preferably 0 or an integer of 1 to 4, particularly preferably 0, 1 or 2, at Y. In $-(CH_2)_m-O-(CH_2)_n-$, m=n=0 or m=0 and n=1 is more preferable, most preferably m=0 and n=1. In $-O-(CH_2)_m-CR^{a15}R^{a16}-(CH_2)_n-$, m=n=0, m=0 and n=1, m=1 and n=0 or m=1 and n=1 is more preferable, most preferably m=0 and n=1.

When Y is $-O-(CH_2)_m-CR^{a15}R^{a16}-(CH_2)_n-$, R^{a16} is preferably hydrogen atom, R^{a15} is preferably

$$-- (CH_2) \frac{}{n'} - (Z') w'$$

wherein the

$$(CH_2)_n R^{a \cdot 16}$$

$$(CH_2)_{n'} R^{a \cdot 16}$$

$$(CH_2)_{n'} (Z') w'$$

25

10

15

20

moiety is preferably symmetric. The preferable mode of n, ring B, Z and w and the preferable mode of n', ring B', Z' and w' are the same.

When ring A is phenyl, X or Y is preferably present at the 30 para-position relative to G^6 . When ring B and ring B' are phenyl,

Z is preferably present at the ortho or meta-position relative to Y. It is preferable that the 3-position on phenyl have one substituent or the 2-position and the 5-position on phenyl each have one substituent.

When ring B is bonded to Y as pyridin-2-yl, Z is preferably substituted at the 3-position and 6-position of pyridyl; when it is bonded to Y as pyridin-3-yl, Z is preferably substituted at the 2-position and 5-position of pyridyl; and when it is bonded to Y as pyridin-4-yl, Z is preferably substituted at the 2-position and 5-position of pyridyl.

When ring B is thiazolyl, Y is preferably substituted at the 5-position, and Z is preferably substituted at the 2-position, the 4-position or the 2-position and the 4-position. Similarly, when ring B' is thiazolyl, $(CH_2)_n$ is also preferably substituted at the 5-position, and Z' is preferably substituted at the 2-position, the 4-position or the 2-position and the 4-position.

Z and Z' are preferably group D, " C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from group D" or "heterocyclic group optionally substituted by 1 to 5 substituent(s) selected from group D", particularly preferably group D or " C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from group D".

More preferably, they are the above-defined halogen atom, nitro, the above-defined optionally substituted C_{1-6} alkyl, $-(CH_2)_t - COR^{a18}, -(CH_2)_t - COOR^{a19}, -(CH_2)_t - CONR^{a27}R^{a28}, -(CH_2)_t - OR^{a20}, \\ -(CH_2)_t - NR^{a29}CO - R^{a24}, -(CH_2)_t - S(O)_q - R^{a25} \text{ or } -(CH_2)_t - SO_2 - NHR^{a26}, \text{ or } C_{6-14} \\ \text{aryl or heterocyclic group optionally substituted by these.}$

With regard to Z and Z', the preferable mode of group D that directly substitutes each ring B and ring B' and the 30 preferable mode of group D that substitutes C_{6-14} aryl, C_{3-8} cycloalkyl, C_{6-14} aryl C_{1-6} alkyl or heterocyclic group are the same, wherein they may be the same with or different from each other.

Specific examples of the substituent preferably include

fluorine atom, chlorine atom, bromine atom, nitro, cyano, methyl,
ethyl, propyl, isopropyl, tert-butyl, trifluoromethyl,
hydroxymethyl, 2-hydroxyethyl, methoxymethyl, 2-carboxylethyl,
methoxycarbonylmethyl, ethoxycarbonylmethyl,

```
carbamoylmethoxymethyl, (dimethylaminocarbonyl) methoxymethyl,
   acetyl, isovaleryl, carboxyl, methoxycarbonyl, ethoxycarbonyl,
   carbamoyl, methylaminocarbonyl, hydroxyaminocarbonyl,
   ethylaminocarbonyl, propylaminocarbonyl, isopropylaminocarbonyl,
5 butylaminocarbonyl, isobutylaminocarbonyl, tert-
   butylaminocarbonyl, (4-hydroxybutyl) aminocarbonyl, (1-
   hydroxypropan-2-yl) aminocarbonyl, (2,3-dihydroxypropyl) -
   aminocarbonyl, (1,3-dihydroxypropan-2-yl)aminocarbonyl,
   methoxyaminocarbonyl, {2-[2-(methoxy)ethoxy]ethyl}aminocarbonyl,
10 N-ethyl-N-methylaminocarbonyl, N-methyl-N-propylaminocarbonyl, N-
   isopropyl-N-methylaminocarbonyl, dimethylaminocarbonyl,
   diethylaminocarbonyl, (2-hydroxyethyl)aminocarbonyl, (2-hydroxy-
   2-methylpropan-2-yl)aminocarbonyl, (carboxylmethyl)aminocarbonyl,
   hydroxyl group, methoxy, ethoxy, propyloxy, isopropyloxy,
15 butyloxy, isopentyloxy, 2-isopentenyloxy, 3-isohexenyloxy, 4-
   methyl-3-pentenyloxy, 2-propynyloxy, trifluoromethyloxy,
   hydroxymethyloxy, carboxylmethyloxy, (dimethylaminocarbonyl) -
   methyloxy, amino, methylamino, dimethylamino, diethylamino,
   acetylamino, N-acetyl-N-methylamino, N-acetyl-N-ethylamino, N-
20 acetyl-N-propylamino, N-acetyl-N-isopropylamino, N-ethylcarbonyl-
   N-methylamino, N-ethyl-N-(ethylcarbonyl)amino, ureido,
   isopropylcarbonylamino, isobutylcarbonylamino, tert-
   butylcarbonylamino, (ethylamino) carbonylamino, (isopropylamino) -
   carbonylamino, (dimethylamino) carbonylamino, (4-
25 hydroxypiperidino) carbonylamino, [(4-hydroxypiperidino) methyl]-
   carbonylamino, [(3-hydroxypyrrolidinyl)methyl]carbonylamino,
   methylsulfonylamino, isopropylsulfonylamino, N-(methylsulfonyl)-
   N-methylamino, N-(ethylsulfonyl)-N-methylamino, N-
   (isopropylsulfonyl) -N-methylamino, N-(methylsulfonyl) -N-
30 ethylamino, N-(methylsulfonyl)-N-propylamino, N-(ethylsulfonyl)-
   N-ethylamino, methylthio, methylsulfonyl, isopropylsulfonyl,
   isobutylsulfonyl, methylsulfinyl, isopropylsulfinyl,
   aminosulfonyl, methylaminosulfonyl, dimethylaminosulfonyl,
   isopropylaminosulfonyl, tert-butylaminosulfonyl, hydroxyamidino,
35 phenyl, 3-fluorophenyl, 4-fluorophenyl, 3-chlorophenyl, 4-
   chlorophenyl, 2,4-difluorophenyl, 3,4-difluorophenyl, 3,4-
   dichlorophenyl, 3,5-dichlorophenyl, 4-chloro-3-fluorophenyl, 4-
```

chloro-2-fluorophenyl, 4-bromophenyl, 4-nitrophenyl, 4-

```
cyanophenyl, 4-methylphenyl, 4-ethylphenyl, 4-propylphenyl, 4-
   isopropylphenyl, 4-tert-butylphenyl, 2-trifluoromethylphenyl, 4-
   trifluoromethylphenyl, 4-(hydroxymethyl)phenyl, 4-(2-
   hydroxyethyl) phenyl, 4-(methoxymethyl) phenyl, 4-(2-
5 carboxylethyl) phenyl, 4-(methoxycarbonylmethyl) phenyl, 4-
   (ethoxycarbonylmethyl)phenyl, 4-acetylphenyl, 3-carboxylphenyl,
   4-carboxylphenyl, 4-(methoxycarbonyl)phenyl, 4-
   (ethoxycarbonyl)phenyl, 4-carbamoylphenyl, 4-
   (methylaminocarbonyl) phenyl, 4-(isopropylaminocarbonyl) phenyl, 4-
10 (dimethylaminocarbonyl) phenyl, 4-(diethylaminocarbonyl) phenyl, 4-
   [(2-hydroxyethyl)aminocarbonyl]phenyl, 4-
   [(carboxylmethyl)aminocarbonyl]phenyl, 4-hydroxyphenyl, 4-
   methoxyphenyl, 3,4,5-trimethoxyphenyl, 4-ethoxyphenyl, 4-
   propyloxyphenyl, 4-isopropyloxyphenyl, 4-butyloxyphenyl, 4-
15 isopentyloxyphenyl, 4-(2-isopentenyloxy)phenyl, 4-(3-
   isohexenyloxy) phenyl, 4-(4-methyl-3-pentenyloxy) phenyl, 4-(2-
   propynyloxy) phenyl, 4-(trifluoromethyloxy) phenyl, 4-
   (hydroxymethyloxy) phenyl, 4-(carboxylmethyloxy) phenyl, 4-
   [(dimethylaminocarbonyl)methyloxy]phenyl, 4-aminophenyl, 4-
20 (methylamino) phenyl, 4-(dimethylaminophenyl), 4-(diethylamino) -
   phenyl, 4-(acetylamino) phenyl, N-acetyl-N-methylamino, 4-(N-
   acetyl-N-methylamino)phenyl, 4-(N-acetyl-N-ethylamino)phenyl, 4-
   (N-acetyl-N-propylamino) phenyl, 4-(N-acetyl-N-
   isopropylamino) phenyl, 4-(N-ethylcarbonyl-N-methylamino) phenyl,
25 4-[N-ethyl-N-(ethylcarbonyl)amino]phenyl, 4-
   (methylsulfonylamino) phenyl, 4-(methylthio) phenyl, 4-
   (methylsulfonyl) phenyl, 4-(methylsulfinyl) phenyl, 4-
   (aminosulfonyl) phenyl, 4-(methylaminosulfonyl) phenyl, 4-
   (dimethylaminosulfonyl) phenyl, 4-(tert-butylaminosulfonyl) phenyl,
30 tetrazol-5-ylphenyl, cyclohexyl, benzyl, 4-chlorobenzyl,
   phenethyl, benzyloxy, 4-fluorobenzyloxy, 2-chlorobenzyloxy, 3-
   chlorobenzyloxy, 4-chlorobenzyloxy, 4-tert-butylbenzyloxy, 4-
   trifluoromethylbenzyloxy, phenethyloxy, 2-thienyl, 2-thiazolyl,
   2-pyridyl, 3-pyridyl, 4-pyridyl, 6-fluoropyridin-3-yl, 5-
35 fluoropyridin-2-yl, 6-chloropyridin-3-yl, 6-methylpyridin-3-yl,
   2-pyrimidinyl, 5-tetrazolyl, piperidino, 2-oxopiperidin-1-yl, 2-
   oxopyrrolidin-1-yl, 2-imidazolin-2-yl, 2-oxoimidazolidin-1-yl, 2-
   oxooxazolidin-1-yl, 2-methylthiazol-4-yl, 5-methylthiazol-2-yl,
```

```
2-aminothiazol-4-yl, 3-methyl-1,2,4-oxadiazol-5-yl, 1,1-
   dioxoisothiazolidin-2-yl, 4,4-dimethyl-\Delta^2-oxazolin-2-yl, 5-
   chlorothiophen-2-yl, 5-methyloxazol-2-yl, 5-oxo-\Delta^2-1,2,4-
   oxadiazolin-3-yl, 5-oxo-\Delta^2-1,2,4-thiadiazolin-3-yl, 2-oxo-3H-
 5 1,2,3,5-oxathiadiazolin-4-yl, 4-hydroxypiperidinomethyl,
   piperidinocarbonyl, 4-hydroxypiperidinocarbonyl, 3,4-
   dihydroxypiperidinocarbonyl, 1-piperazinylcarbonyl, 1-
   pyrrolidinylcarbonyl, morpholinocarbonyl, 4-
   thiomorpholinylcarbonyl, phenoxy, 2,4-dichlorophenoxy,
10 tetrahydropyranyloxy, 2-pyridylmethyloxy, 3-pyridylmethyloxy, 2-
   chloropyridin-4-ylmethyloxy, 4-pyridylmethyloxy, 2-
   piperidylmethyloxy, 3-piperidylmethyloxy, 4-piperidylmethyloxy,
   1-methylpiperidin-4-ylmethyloxy, 1-acetylpiperidin-4-ylmethyloxy,
   1-(tert-butoxycarbonyl)piperidin-4-ylmethyloxy, 1-
15 (methylsulfonyl)piperidin-4-ylmethyloxy, 2-methylthiazolin-4-
   yloxy, 2,4-dimethylthiazolin-5-yloxy, dimethylaminocarbonyl-
   methyloxy, piperidinocarbonylmethyloxy, 4-hydroxypiperidino-
   carbonylmethyloxy, 2-methylthiazol-4-yl, (2-methylthiazol-4-
   yl)methyloxy, (2,4-dimethylthiazol-5-yl)methyloxy, benzoyl, 3-
20 fluorobenzoyl, 4-chlorobenzylamino, 3,5-dichlorobenzylamino, 4-
   trifluoromethylbenzylamino, 2-pyridylmethylamino, benzoylamino,
   4-chlorobenzoylamino, 4-trifluoromethylbenzoylamino, 3,5-
   dichlorobenzoylamino, 3-nitro-4-methoxybenzoylamino, 4-nitro-3-
   methoxybenzoylamino, 3-pyridylcarbonylamino, morpholinocarbonyl-
25 amino, 2-oxazolinylamino, 4-hydroxypiperidinosulfonyl, 4-
   methylphenylsulfonylamino, 2-thiazolylaminosulfonyl, 2-
   pyridylaminosulfonyl, benzylaminocarbonyl, N-benzyl-N-
   methylaminocarbonyl, (4-pyridylmethyl)aminocarbonyl or
   (cyclohexylmethyl) aminocarbonyl, 2-hydroxyethyloxy, 3-
30 hydroxypropyloxy, 2-methoxyethoxy, 2-(2-methoxyethoxy) ethoxy,
   azetidinylcarbonyl, 3-hydroxypyrrolidinylcarbonyl, 3-
   hydroxypiperidinocarbonyl, 4-hydroxypiperidinocarbonyl, 3,4-
   dihydroxypiperidinocarbonyl, 4-methoxypiperidinocarbonyl, 4-
   carboxypiperidinocarbonyl, 4-(hydroxymethyl)piperidinocarbonyl,
35 2-oxopiperidinocarbonyl, 4-oxopiperidinocarbonyl, 2,6-
   dimethylpiperidinocarbonyl, 2,2,6,6-tetramethylpiperidinocarbonyl,
   2,2,6,6-tetramethyl-4-hydroxypiperidinocarbonyl, 1-
```

oxothiomorpholin-4-ylcarbonyl, 1,1-dioxothiomorpholin-4-

ylcarbonyl, 1-(methylsulfonyl)piperidin-4-ylaminocarbonyl, 4-methylsulfonylpiperazinylcarbonyl, 4-methylpiperazinylcarbonyl, N,N-bis(2-hydroxyethyl)aminocarbonyl, phenylaminocarbonyl, cyclopropylaminocarbonyl, cyclobutylaminocarbonyl,

5 cyclohexylaminocarbonyl, 4-hydroxycyclohexylaminocarbonyl, 4-methylthiazol-2-ylmethylaminocarbonyl, 2-(4-hydroxypiperidino)-ethyloxy, 2-pyridylmethylaminocarbonyl, 3-pyridylmethylaminocarbonyl, N-methyl-N-(4-pyridylmethyl)aminocarbonyl, cyclohexylmethyloxy, 4-hydroxypiperidinocarbonylmethyloxy and 4-methylthiazol-2-ylmethyloxy.

Particularly preferable examples of the substituent include fluorine atom, chlorine atom, bromine atom, nitro, cyano, methyl, hydroxymethyl, carboxyl, carbamoyl, methylaminocarbonyl, isopropylaminocarbonyl, dimethylaminocarbonyl, diethylamino-15 carbonyl, (2-hydroxylethyl) aminocarbonyl, (carboxymethyl) aminocarbonyl, methoxy, 2-isopentenyloxy, 2-propynyloxy, methylthio, methylamino, dimethylamino, acetylamino, N-acetyl-Nmethylamino, N-acetyl-N-ethylamino, N-acetyl-N-propylamino, Nacetyl-N-isopropylamino, N-ethylcarbonyl-N-methylamino, N-ethyl-20 N-(ethylcarbonyl)amino, methylsulfonylamino, methylsulfonyl, aminosulfonyl, dimethylaminosulfonyl, tert-butylaminosulfonyl, phenyl, 3-fluorophenyl, 4-fluorophenyl, 3-chlorophenyl, 4chlorophenyl, 3,5-dichlorophenyl, 4-nitrophenyl, 4-methylphenyl, 4-tert-butylphenyl, 4-trifluoromethylphenyl, 4-(methoxymethyl)-25 phenyl, 4-(2-hydroxylethyl)phenyl, 3-carboxylphenyl, 4carboxylphenyl, 4-methoxyphenyl, 4-carbamoylphenyl, 4methylthiophenyl, 4-(dimethylaminocarbonyl)phenyl, 4methylsulfonylphenyl, benzyl, phenethyl, benzyloxy, 4fluorobenzyloxy, 4-chlorobenzyloxy, 2-thiazolyl, 3-pyridyl, 4-30 pyridyl, 4-pyridylmethyloxy, 2-piperidylmethyloxy, 3piperidylmethyloxy, 4-piperidylmethyloxy, 1-methylpiperidin-4ylmethyloxy, 1-acetylpiperidin-4-ylmethyloxy, 2-chloropiperidin-4-ylmethyloxy, 1-(methylsulfonyl)piperidin-4-ylmethyloxy, 2methylthiazol-4-yl, (2-methylthiazol-4-yl)methyloxy, (2,4-35 dimethylthiazol-5-yl) methyloxy, 5-tetrazolyl, 3-fluorobenzoyl, piperidinocarbonyl, 4-hydroxylpiperidinocarbonyl, 1pyrrolidinylcarbonyl, morpholinocarbonyl, 4thiomorpholinylcarbonyl, benzylaminocarbonyl, N-benzyl-N-

methylaminocarbonyl, (4-pyridylmethyl)aminocarbonyl and (cyclohexylmethyl)aminocarbonyl.

Most preferable substituents are fluorine atom, chlorine atom, methyl, hydroxymethyl, carboxyl, carbamoyl,

5 methylaminocarbonyl, dimethylaminocarbonyl, methoxy, methylamino, acetylamino, aminosulfonyl, dimethylaminosulfonyl, tert-butylaminosulfonyl, phenyl, 3-fluorophenyl, 4-fluorophenyl, 3-chlorophenyl, 4-chlorophenyl, 3,5-dichlorophenyl, 4-methylphenyl, 4-tert-butylphenyl, 4-trifluoromethylphenyl, 4-carboxylphenyl, 4-methylphenyl, 4-carboxylphenyl, 4-(dimethylaminocarbonyl)phenyl, 4-methylsulfonylphenyl and 2-oxopyrrolidin-1-yl.

The w is preferably 1 or 2, r and t are preferably 0, 1 or 2, particularly preferably 0 or 1, more preferably 0, p is preferably 1, and q is preferably 0 or 2.

In formula [I], when X is

wherein each symbol is as defined above and w is 2 or above, one of Z is preferably C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from group D or heterocyclic group optionally substituted by 1 to 5 substituent(s) selected from group D, particularly preferably C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from group D.

When ring B is phenyl, w is 2 and phenyl is bonded to Y at the 1-position, one of the most preferable embodiments is that wherein Z is bonded to the 2-position and 5-position of phenyl, Z at the 2-position is ${}^{\circ}C_{6-14}$ aryl optionally substituted by 1 to 5 substituent(s) selected from group D" and Z at the 5-position is ${}^{\circ}$ heterocyclic group optionally substituted by 1 to 5 substituent(s) selected from group D".

The pharmaceutically acceptable salt may be any as long as it forms a non-toxic salt with a compound of the above-mentioned formula [I] or [II]. Such salt can be obtained by reacting the compound with an inorganic acid, such as hydrochloric acid, sulfuric acid, phosphoric acid, hydrobromic acid and the like, or an organic acid, such as oxalic acid, malonic acid, citric acid, fumaric acid, lactic acid, malic acid, succinic acid, tartaric

acid, acetic acid, trifluoroacetic acid, gluconic acid, ascorbic acid, methylsulfonic acid, benzylsulfonic acid, meglumine acid and the like, or an inorganic base, such as sodium hydroxide, potassium hydroxide, calcium hydroxide, magnesium hydroxide, ammonium hydroxide and the like, or an organic base, such as methylamine, diethylamine, triethylamine, triethanolamine, ethylenediamine, tris(hydroxymethyl)methylamine, guanidine, choline, cinchonine and the like, with an amino acid, such as lysine, arginine, alanine and the like. The present invention encompasses water-retaining product, hydrate and solvate of each compound.

The compounds of the above-mentioned formula [I] or [II] have various isomers. For example, E compound and Z compound are present as geometric isomers, and when the compound has an asymmetric carbon, an enantiomer and a diastereomer are present due to the asymmetric carbon. A tautomer may be also present. The present invention encompasses all of these isomers and mixtures thereof.

The present invention also encompasses prodrug and 20 metabolite of each compound.

A prodrug means a derivative of the compound of the present invention, which is capable of chemical or metabolic decomposition, which shows inherent efficacy by reverting to the original compound after administration to a body, and which includes salts and complexes without a covalent bond.

When the inventive compound is used as a pharmaceutical preparation, the inventive compound is generally admixed with pharmaceutically acceptable carriers, excipients, diluents, binders, disintegrators, stabilizers, preservatives, buffers, emulsifiers, aromatics, coloring agents, sweeteners, thickeners, correctives, solubilizers, and other additives such as water, vegetable oil, alcohol such as ethanol, benzyl alcohol and the like, polyethylene glycol, glycerol triacetate, gelatin, lactose, carbohydrate such as starch and the like, magnesium stearate, talc, lanolin, petrolatum and the like, and prepared into a dosage form of tablets, pills, powders, granules, suppositories, injections, eye drops, liquids, capsules, troches, aerosols, elixirs, suspensions, emulsions, syrups and the like, which can

be administered systemically or topically and orally or parenterally.

While the dose varies depending on the age, body weight, general condition, treatment effect, administration route and the 5 like, it is from 0.1 mg to 1 g for an adult per dose, which is given one to several times a day.

The prophylaxis of hepatitis C means, for example, administration of a pharmaceutical agent to an individual found to carry an HCV by a test and the like but without a symptom of hepatitis C, or to an individual who shows an improved disease state of hepatitis after a treatment of hepatitis C, but who still carries an HCV and is associated with a risk of recurrence of hepatitis.

The therapeutic agent for hepatitis C of the present
invention is expected to provide a synergestic effect when
concurrently used with other antiviral agents, antiinflammatory
agents or immunostimulants.

The medicaments with the prospect of synergestic effect include, for example, interferon- α , interferon- β , interferon- γ , interleukin-2, interleukin-8, interleukin-10, interleukin-12, TNF α , recombinant or modified products thereof, agonists, antibodies, vaccines, ribozymes, antisense nucleotides and the like.

As evidenced in the combination therapy of anti-HIV agents,

25 which is also called a cocktail therapy, the combined use of

various anti-virus agents againt viruses showing frequent genetic

mutations is expected to show effect for suppressing emergence

and increase of drug tolerant viruses. For example, 2 or 3 agents

from HCV-IRES inhibitors, HCV-NS3 protease inhibitors, HCV-NS2NS3

30 protease inhibitors, HCV-NS5A inhibitors and HCV polymerase

inhibitor may be used in combination. Specifically, the combined

use with Ribavirin(R), interferon-α (IFN-α, Roferon(R), Intron

A(R), Sumiferon(R), MultiFeron(R), Infergen(R), Omniferon(R),

Pegasys(R), PEG-Intron A(R)), interferon-β (Frone(R), Rebif(R),

35 AvoneX(R), IFNβMOCHIDA(R)), interferon-ω, 1-β-L-ribofuranosyl-1H
1,2,4-triazole-3-carboxamide, 16α-bromo-3β-hydroxy-5α-androstan
17-one, 1H-imidazole-4-ethanamide dihydrochloride, HCV ribozyme

Heptazyme(R), polyclonal antibody Civacir(R), lactoferrin GPX-400,

(1S,2R,8R,8aR)-1,2,8-trihydroxyoctahydroindolizidinium chloride,
HCV vaccine (MTH-68/B, Innivax C(R), Engerix B(R)), antisense
oligonucleotide ISIS-14803, HCV-RNA transcriptase inhibitor VP50406, tetrachlorodecaoxide (high concentration Oxoferin(R)),
5 tetrahydrofuran-3-yl (S)-N-3-[3-(3-methoxy-4-oxazol-5ylphenyl)ureido]benzylcarbamate, 4-amino-2-ethoxymethyl-α,αdimethyl-1H-imidazo[4,5-c]quinoline-1-ethanol, interleukin-2
(Proleukin(R)), thymosin αl and the like is exemplified, wherein
(R) shows product names.

Furthermore, the combined use with the compounds disclosed in JP-A-08-268890, JP-A-10-101591, JP-A-07-069899, W099/61613 and the like as HCV IRES inhibitors; the compounds disclosed in W098/22496, W099/07733, W099/07734, W000/09543, W000/09558, WOO1/59929, WO98/17679, EP932617, WO99/50230, WOO0/74768, 15 WO97/43310, US5990276, WO01/58929, WO01/77113, WO02/8198, WOO2/8187, WOO2/8244, WOO2/8256, WOO1/07407, WOO1/40262, WO01/64678, WO98/46630, JP-A-11-292840, JP-A-10-298151, JP-A-11-127861, JP-A-2001-103993, WO98/46597, WO99/64442, WO00/31129, WO01/32961, WO93/15730, US7832236, WO00/200400, WO02/8251, 20 WOO1/16379, WOO2/7761 and the like as HCV protease inhibitors; the compounds disclosed in WO97/36554, US5830905, WO97/36866, US5633388, WO01/07027, WO00/24725 and the like as HCV helicase inhibitors; the compounds disclosed in WO00/10573, WO00/13708, WO00/18231, WO00/06529, WO02/06246, WO01/32153, WO01/60315, 25 WO01/77091, WO02/04425, WO02/20497, WO00/04141 and the like as HCV polymerase inhibitors; the compounds disclosed in WO01/58877, JP-A-11-180981, WO01/12214 and the like as interferon agonists or enhancers; and the like is also exemplified.

Inasmuch as HCV is known to be a virus associated with
many genetic mutations, a compound effective for many genotypes
is one of the preferable modes. If a compound ensures high blood
concentration when administered as a pharmaceutical agent to an
animal infected with HCV, it is also one of the preferable modes.
From these aspects, a compound having high inhibitory activity on
both HCV type 1a and type 1b and high blood concentration, such
as 2-{4-[2-(4-chlorophenyl)-5-(2-oxopyrrolidin-1-yl)benzyloxy]-2fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
hydrochloride, is particularly preferable.

Examples of the production method of the compound to be used for the practice of the present invention are given in the following. However, the production method of the compound of the present invention is not limited to these examples.

5 Even if no directly corresponding disclosure is found in the following Production Methods, the steps may be modified for efficient production of the compound, such as introduction of a protecting group into a functional group with deprotection in a subsequent step, and changing the order of Production Methods and steps.

The treatment after reaction in each step may be conventional ones, for which typical methods, such as isolation and purification, crystallization, recrystallization, silica gel chromatography, preparative HPLC and the like, can be appropriately selected and combined.

Production Method 1

In this Production Method, a benzimidazole compound is formed from a nitrobenzene compound.

Production Method 1-1

wherein Hal is halogen atom, such as chlorine atom, bromine atom and the like, R^{cl} is halogen atom, such as chlorine atom, bromine atom and the like, or hydroxyl group, and other symbols are as defined above.

25 Step 1

20

A compound [1] obtained by a conventional method or a commercially available compound [1] is reacted with amine compound [2] in a solvent such as N,N-dimethylformamide (DMF), acetonitrile, tetrahydrofuran (THF), toluene and the like in the presence or absence of a base such as potassium carbonate, triethylamine, potassium t-butoxide and the like at room temperature or with heating to give compound [3].

Step 2

The compound [3] is hydrogenated in a solvent such as

10 methanol, ethanol, THF, ethyl acetate, acetic acid, water and the
like in the presence of a catalyst such as palladium carbon,
palladium hydroxide, platinum oxide, Raney nickel and the like at
room temperature or with heating to give compound [4]. In
addition, compound [3] is reduced with a reducing agent such as

15 zinc, iron, tin(II) chloride, sodium sulfite and the like, or
reacted with hydrazine in the presence of iron(III) chloride to
give compound [4]. The compound [4] can be also obtained by
reacting compound [3] with sodium hydrosulfite under alkaline
conditions.

20 Step 3

The compound [4] is condensed with carboxylic acid compound [5] in a solvent such as DMF, acetonitrile, THF, chloroform, ethyl acetate, methylene chloride, toluene and the like using a condensing agent such as dicyclohexylcarbodiimide, 1-ethyl-3-(3-25 dimethylaminopropyl) carbodiimide hydrochloride, diphenylphosphoryl azide and the like and, where necessary, adding N-hydroxysuccinimide, 1-hydroxybenzotriazole and the like to give amide compound [6]. Alternatively, amide compound [6] can be obtained from compound [5] as follows. The carboxylic acid 30 compound [5] is converted to an acid halide derived with thionyl chloride, oxalyl chloride and the like, or an active ester (e.g., mixed acid anhydride derived with ethyl chlorocarbonate and the like), which is then reacted in the presence of a base, such as triethylamine, potassium carbonate, pyridine and the like, or in 35 an amine solvent, such as pyridine and the like, to give amide compound [6].

Step 4

The compound [6] is heated in a solvent such as ethanol, methanol, toluene, DMF, chloroform and the like or without a solvent in the presence of an acid such as acetic acid, formic acid, hydrochloric acid, dilute sulfuric acid, phosphoric acid, polyphosphoric acid, p-toluenesulfonic acid and the like, a halogenating agent such as zinc chloride, phosphorus oxychloride, thionyl chloride and the like or acid anhydride such as acetic anhydride and the like, to allow cyclization to give compound [I-2].

10 Production Method 1-2

This Production Method is an alternative method for producing compound [I-2].

Step 3

$$R^2$$
 R^3
 R^4
 R^5
 R^6

wherein each symbol is as defined above.

15 Step 1

The compound [3] obtained in the same manner as in Step 1 of Production Method 1-1 is subjected to amide condensation with compound [5] in the same manner as in Step 3 of Production Method 1-1 to give compound [7].

20 Step 2

The compound [7] is reduced in the same manner as in Step 2 of Production Method 1-1 to give compound [8].

Step 3

The compound [8] is subjected to cyclization in the same 25 manner as in Step 4 of Production Method 1-1 to give compound [I-2].

Production Method 1-3

wherein R^{c2} is alkyl such as methyl, ethyl and the like, and other symbols are as defined above.

The compound [4] is reacted with imidate compound [9] in a solvent such as methanol, ethanol, acetic acid, DMF, THF, chloroform and the like at room temperature or with heating to give compound [I-2].

In addition, compound [4] may be reacted with aldehyde compound [10] in a solvent such as acetic acid, formic acid, acetonitrile, DMF, nitrobenzene, toluene and the like in the presence or absence of an oxidizing agent such as benzofuroxan, manganese dioxide, 2,3-dichloro-5,6-dicyano-p-benzoquinone, iodine, potassium ferricyanide and the like with heating to give compound [1-2].

Alternatively, compound [4] and carboxylic acid compound [11] may be heated to allow reaction in the presence of polyphosphoric acid, phosphoric acid, phosphorus oxychloride, hydrochloric acid and the like to give compound [I-2].

Production Method 2

20

In this Production Method, conversion of the substituents $(R^1,\ R^2,\ R^3,\ R^4)$ on the benzene ring of benzimidazole is shown. While a method of converting R^2 when $R^1,\ R^3$ and R^4 are hydrogen atoms is shown, this Production Method is applicable irrespective of the position of substitution.

Production Method 2-1

Conversion of carboxylic acid ester moiety to amide

wherein E is a single bond, $-(CH_2)_s$ -, $-O-(CH_2)_s$ - or $-NH-(CH_2)_s$ 5 (wherein s is an integer of 1 to 6), R^{c3} , R^{c4} and R^{c5} are C_{1-6} alkyl, and other symbols are as defined above.

Step 1

The compound [I-2-1] obtained in the same manner as in the above-mentioned Production Method is subjected to hydrolysis in a solvent such as methanol, ethanol, THF, dioxane and the like, or in a mixed solvent of these solvents and water under basic conditions with sodium hydroxide, potassium hydroxide, potassium carbonate, lithium hydroxide and the like or under acidic conditions with hydrochloric acid, sulfuric acid and the like to give compound [I-2-2].

Step 2

The compound [I-2-2] is reacted with compound [12] in the same manner as in Step 3 of Production Method 1-1 to give compound [I-2-3].

20 Production Method 2-2

Conversion of cyano group to substituted amidino group

NC
$$R^5$$
 NH_2OH H_2N $II-2-5]$

wherein each symbol is as defined above.

The compound [I-2-4] obtained in the same manner as in the above-mentioned Production Method is reacted with hydroxylamine in a solvent such as water, methanol, ethanol, THF, DMF and the like to give compound [I-2-5]. When a salt of hydroxylamine such

as hydrochloride and the like is used, the reaction is carried out in the presence of a base such as sodium hydrogencarbonate, sodium hydroxide, triethylamine and the like.

Production Method 2-3

5 Conversion of sulfonic acid ester moiety to sulfonic acid

wherein \textbf{R}^{c6} is $\textbf{C}_{1\text{--}6} \; \text{alkyl}\text{,}$ and other symbols are as defined above.

The compound [I-2-6] obtained in the same manner as in the above-mentioned Production Method is reacted with iodide salt such as sodium iodide, lithium iodide and the like, bromide salt such as sodium bromide, trimethylammonium bromide and the like, amine such as pyridine, trimethylamine, triazole and the like, phosphine such as triphenylphosphine and the like in a solvent such as DMF, dimethyl sulfoxide (DMSO), acetonitrile, methanol, ethanol, water and the like with heating to give compound [I-2-7]. Production Method 3

This Production Method relates to convertion of the substituent(s) on phenyl group at the 2-position of benzimidazole.

20 This Production Method can be used even when phenyl is a different ring.

Production Method 3-1

Conversion of hydroxyl group to ether

$$R^{2}$$
 R^{3}
 R^{4}
 R^{6}
 R^{6

wherein R^{c7} is optionally substituted alkyl corresponding to R^{a11} , G^1 is a single bond, $*-(CH_2)_n-$, $*-(CH_2)_n-O-$, $*-(CH_2)_n-CO-$ or $*-(CH_2)_m-CR^{a15}R^{a16})-(CH_2)_n-$, wherein * show the side to be bonded to R^{c1} , and other symbols are as defined above.

When R^{cl} of compound [13] is halogen atom, compound [I-2-8] obtained in the same manner as in the above-mentioned Production Method is reacted with compound [13] in a solvent such as DMF, DMSO, acetonitrile, ethanol, THF and the like in the presence of a base such as sodium hydride, sodium hydroxide, potassium hydroxide, potassium carbonate, sodium ethoxide, potassium to butoxide and the like at room temperature or with heating to give compound [II-2-1].

When R^{c1} of compound [13] is hydroxyl group, the hydroxyl group of compound [13] is converted to halogen atom with thionyl chloride, phosphorus tribromide, carbon tetrabromide - triphenylphosphine and the like and reacted with compound [I-2-8] by the aforementioned method to give compound [II-2-1]. In this case, compound [I-2-8] may be subjected to Mitsunobu reaction with compound [13] in a solvent such as DMF, acetonitrile, THF and the like using triphenylphosphine - diethyl azodicarboxylate and the like to give compound [II-2-1].

The compound [I-2-9] can be obtained in the same manner from compound [I-2-8] and compound [14].

25 Production Method 3-2

Conversion of nitro to substituted amino group

wherein $R^{c\theta}$ is C_{1-6} alkyl, G^2 is *-(CH₂)_n- or *-CHR^{a15}-, G^3 is -CO-, *-CO₂-, *-CONH- or -SO₂-, and other symbols are as defined above. Step 1

The nitro compound [I-2-10] obtained in the same manner as in the above-mentioned Production Method is reacted in the same manner as in Step 2 of Production Method 1-1 to give compound [I-2-11].

Step 2

10

The compound [I-2-11] is alkylated with compound [15] in the same manner as in Production Method 3-1 to give compound [II-2-2]. Step 3

When G^3 of compound [16] is -CO-, -CO₂- or -CONH-, compound [I-2-11] is acylated with compound [16] in the same manner as in Step 3 of Production Method 1-1 to give compound [II-2-3].

When G^3 of compound [16] is $-SO_2$ -, sulfonylation is conducted using sulfonyl halide instead of acid halide used in Step 3 of Production Method 1-1 to give compound [II-2-3].

The compound [I-2-11] is acylated with compound [17] in the same manner as above to give compound [I-2-12].

This Production Method is applied in the same manner as above to give disubstituted compounds (tertiary amine) of compound [II-2-2], compound [II-2-3] and compound [I-2-12].

Production Method 3-3

5 Conversion of carboxylic acid ester moiety to amide

[1-2-14]

$$R^{2}$$
 R^{3}
 R^{4}
 R^{4}
 R^{5}
 R^{6}
 R^{6}

wherein R^{c9} is C_{1-6} alkyl, G^4 is $\#-(CH_2)_n-$, $\#-(CH_2)_n-NH-$ or $\#-CHR^{a14}-$ wherein # shows the side that is bounded to amine and other symbols are as defined above.

Step 1

The compound [I-2-13] obtained in the same manner as in the above-mentioned Production Method is reacted in the same manner as in Step 1 of Production Method 2-1 to give compound [I-15 2-14].

Step 2

The compound [I-2-14] is reacted with compound [18] in the same manner as in Step 2 of Production Method 2-1 to give compound [II-2-4].

The compound [I-2-15] is obtained from compound [I-2-14] and compound [19] in the same manner as above.

Production Method 4

In this Production Method, additional substituent(s) is(are) introduced into ring B on phenyl group that substitutes the 225 position of benzimidazole. This Production Method is applicable even when phenyl is a different ring.

Production Method 4-1

Direct bonding of ring Z" to ring B

wherein ring Z"-M is aryl metal compound, ring Z" moiety is optionally substituted C_{6-14} aryl or optionally substituted 5 heterocyclic group corresponding to substituent Z, and the metal moiety contains boron, zinc, tin, magnesium and the like, such as phenylboronic acid and 4-chlorophenylboronic acid, w" is 0, 1 or 2, and other symbols are as defined above.

The compound [II-2-5] obtained in the same manner as in the
above-mentioned Production Method is reacted with aryl metal
compound [20] in a solvent such as DMF, acetonitrile, 1,2dimethoxyethane, THF, toluene, water and the like in the presence
of a palladium catalyst such as tetrakis(triphenylphosphine)palladium, bis(triphenylphosphine)palladium(II) dichloride,

palladium acetate - triphenylphosphine and the like, a nickel
catalyst such as nickel chloride, [1,3-bis(diphenylphosphino)propane]nickel(II) chloride and the like, and a base such as
potassium carbonate, potassium hydrogencarbonate, sodium hydrogencarbonate, potassium phosphate, triethylamine and the like at room
temperature or with heating, to give compound [II-2-6].

Production Method 4-2

Conversion of hydroxyl group to ether

wherein R^{c10} is $-R^{a20}$ or $-(CH_2)_p-COR^{a21}$ corresponding to substituent 25 Z, and other symbols are as defined above.

The compound [II-2-7] obtained in the same manner as in the above-mentioned Production Method is reacted with compound [21]

in the same manner as in Production Method 3-1 to give compound [II-2-8].

Production Method 4-3

Synthesis in advance of ring B part such as compound [13] in 5 Production Method 3-1

wherein R^{c11} is leaving group such as chlorine atom, bromine atom, iodine atom, trifluoromethanesulfonyloxy and the like, R^{c12} is formyl, carboxyl or carboxylic acid ester such as methoxycarbonyl, ethoxycarbonyl, tert-butoxycarbonyl and the like, and other symbols are as defined above.

Step 1

Commercially available compound [22] or compound [22] 15 obtained by a conventional method is reacted with aryl metal compound [20] in the same manner as in Production Method 4-1 to give compound [23].

Step 2

The compound [23] obtained in the same manner as in the above-mentioned Production Method is reduced according to a conventional method to give compound [24].

For example, compound [23] is reacted with in a solvent such as methanol, ethanol, THF and the like in the presence of a reducing agent such as lithium aluminum hydride, sodium

borohydride and the like under cooling to heating to give compound [24].

Step 3

The compound [24] obtained in the same manner as in the

5 above-mentioned Production Method is reacted in a solvent such as
1,4-dioxane, diethyl ether, THF, dichloromethane, chloroform,
toluene and the like with a halogenating agent, such as
phosphorus pentachloride, phosphorus tribromide, thionyl chloride
and the like, to give compound [25]. For an accerelated reaction,

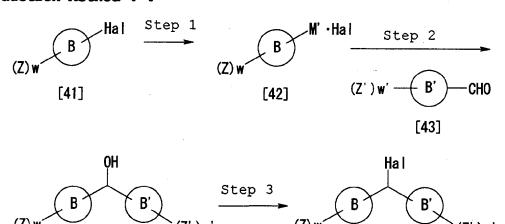
10 the reaction may be carried out in the presence of a tertiary
amine such as DMF, pyridine and the like, or under heating.

Step 4

The compound [24] or [25] obtained in the same manner as in the above-mentioned Production Method is reacted with compound [15 [1-2-8] in the same manner as in Production Method 3-1 to give compound [II-2-9].

Production Method 4-4

[44]



[45]

wherein M' is a metal such as magnesium, lithium, zinc and the 20 like, and other symbols are as defined above.

Step 1

25

Commercially available compound [41] or compound [41] obtained by a conventional method is converted to aryl metal reagent by a conventional method to give compound [42].

For example, when M' is magnesium, magnesium is reacted with compound [41] in a solvent such as THF, diethyl ether, benzene, toluene and the like, preferably THF, from cooling to heating preferably at -100° C to 100° C to give compound [42].

Step 2

The compound [42] obtained in the same manner as in the above-mentioned Production Method is reacted with compound [43] to give compound [44].

The compound [42] is reacted in a solvent such as diethyl ether, benzene, toluene, THF and the like, preferably THF, from cooling to room temperature, preferably at -100°C to 30°C to give compound [44].

Step 3

The compound [44] obtained in the same manner as in the above-mentioned Production Method is halogenated in the same manner as in Step 3 of Production Method 4-3 to give compound [45].

The compound [44] is reacted with thionyl chloride and pyridine preferably in toluene solvent to give compound [45].

When compound [45] is symmetric, namely, when the ring B-(Z)w moiety and the ring B'-(Z')w' moiety are the same, compound [42] is reacted with formate such as methyl formate, ethyl formate and the like, preferably ethyl formate, in a solvent such as diethyl ether, benzene, toluene, THF and the like, preferably THF, from cooling to room temperature, preferably at -100°C to 30°C, to give compound [45].

Production Method 4-5

Method including steps to introduce a protecting group into a functional group

wherein R^{c13} is carboxylic acid protecting group such as tert-butyl and the like, R^{c14} is carboxylic acid protecting group such as methyl and the like and other symbols are as defined above.

Step 1

Commercially available compound [26] or compound [26] obtained by a conventional method is protected by a conventional method to give compound [27].

For example, when R^{c13} is tert-butyl, compound [26] is converted to acid halide with thionyl chloride, oxalyl chloride and the like in a solvent such as THF, chloroform, dichloromethane, toluene and the like, and reacted with potassium tert-butoxide to give compound [27].

As used herein, R^{c13} may be a different protecting group as long as it is not removed during the Step 2 or Step 3 but removed in Step 4 without affecting $-CO_2R^{c14}$.

Step 2

The methyl group of compound [27] obtained in the same 20 manner as in the above-mentioned Production Method is converted

to bromomethyl with N-bromosuccinimide and N,N'- azobisisobutyronitrile and reacted with compound [I-2-16] in the same manner as in Production Method 3-1 to give compound [II-2-10].

5 Step 3

The compound [II-2-10] obtained in the same manner as in the above-mentioned Production Method is reacted with aryl metal compound [20] in the same manner as in Production Method 4-1 to give compound [II-2-11].

10 Step 4

The R^{c13} of the compound [II-2-11] obtained in the same manner as in the above-mentioned Production Method is removed by a conventional method to give compound [II-2-12].

The protecting group of carboxylic acid can be removed by a conventional deprotection method according to the protecting group. In this Step, the conditions free from reaction of R^{c14} are preferable. For example, when R^{c13} is tert-butyl, compound [II-2-11] is treated with trifluoroacetic acid in a solvent such as dichloromethane, chloroform and the like to give compound [II-2-20 12].

Step 5

The compound [II-2-12] obtained in the same manner as in the above-mentioned Production Method is subjected to amide condensation with compound [28] in the same manner as in Step 3 of Production Method 1-1 to give compound [II-2-13].

Step 6

The compound [II-2-13] obtained in the same manner as in the above-mentioned Production Method is deprotected in the same manner as in Step 1 of Production Method 2-1 to give compound [II-2-14].

As used herein, R^{c14} is preferably a protecting group that does not react during the Step 1 through Step 5 but removed in this Step.

For example, when R^{c14} is methyl, compound [II-2-13] is reacted in an alcohol solvent such as methanol, ethanol, npropanol, isopropanol and the like or a mixed solvent of alcohol solvent and water in the presence of a base such as potassium carbonate, sodium carbonate, lithium hydroxide, sodium hydroxide, potassium hydroxide and the like from cooling to heating for deprotection, followed by acidifying the reaction solution to give compound [II-2-14].

Production Method 4-6

wherein g is an integer of 1 to 5, and other sumbols are as defined above.

Step 1

5

The compound [I-2-16] obtained by the above-mentioned
Production Method is reacted with toluene derivative [41] in the
same manner as in Step 2 of Production Method 4-5 to give
compound [II-2-17].

Step 2

The compound [II-2-17] obtained by the above-mentioned

15 Production Method is reacted with aryl metal compound [20] in the same manner as in Production Method 4-1 to give compound [II-2-18].

Step 3

The compound [II-2-18] obtained by the above-mentioned Production Method is reduced in the same manner as in Step 2 of Production Method 1-1 to give compound [II-2-19].

Step 4

The compound [II-2-19] obtained by the above-mentioned Production Method is amide condensed with compound [42] in the same manner as in Step 3 of Production Method 1-1 and subjected to cyclization in the same manner as in Step 1 of Production Method 1-1 to give compound [II-2-20].

10 Step 5

The compound [II-2-20] obtained by the above-mentioned Production Method is hydrolyzed in the same manner as in Step 1 of Production Method 2-1 to give compound [II-2-21].

Production Method 4-7

[11-2-21]

wherein each symbol is as defined above.

Step 1

Commercially available product or compound [46] obtained by 5 a conventional method is reacted with compound [20] in the same manner as in Production Method 4-1 to give compound [47].

Step 2

The compound [47] obtained in the same manner as in the above-mentioned Production Method is reduced in the same manner

as in the above-mentioned Production Method 4-3 Step 2 to give compound [48].

Step 3

The compound [48] obtained in the same manner as in the above-mentioned Production Method is reduced in the same manner as in the above-mentioned Production Method 1-1 Step 2 to give compound [49].

Step 4

The compound [49] obtained in the same manner as in the above-mentioned Production Method is reacted with compound [42] in a solvent such as DMF, acetonitrile, THF, chloroform, ethyl acetate, methylene chloride and toluene to give compound [50]. To enhance the reaction selectivity for amino group, acetic acid and sodium acetate may be added in an equivalent amount ratio.

15 Step 5

The compound [50] obtained in the same manner as in the above-mentioned Production Method is subjected to cyclization reaction in the same manner as in the above-mentioned Production Method 1-1 Step 1 to give compound [51].

20 Step 6

The compound [51] obtained in the same manner as in the above-mentioned Production Method is halogenated in the same manner as in the above-mentioned Production Method 4-3 Step 3 to give compound [52].

25 Step 7

The compound [52] obtained in the same manner as in the above-mentioned Production Method is reacted in the same manner as in the above-mentioned Production Method 3-1 with compound [I-2-16] obtained in the same manner as in the above-mentioned

Production Method to give compound [II-2-20].

Step 8

The compound [II-2-20] obtained in the same manner as in the above-mentioned Production Method is hydrolyzed in the same manner as in the above-mentioned Production Method 2-1 Step 1 to give compound [II-2-21].

Production Method 5

Formation of indole ring

wherein $R^{\text{cl}5}$ is protecting group such as trimethylsilyl, tert-butyldimethylsilyl, tert-butyldiphenylsilyl and the like, and other symbols are as defined above.

5 Step 1

The compound [29] obtained in the same manner as in the above-mentioned Production Method or conventional method is reacted with compound [30] in a solvent such as DMF, acetonitrile, 1,2-dimethoxyethane, THF, toluene, water and the like using a palladium catalyst such as tetrakis(triphenylphosphine)palladium, bis(triphenylphosphine)palladium(II) dichloride, palladium acetate - triphenylphosphine and the like, a copper catalyst such as copper(I) iodide and the like or a mixture thereof, and in the presence of a base such as potassium carbonate, potassium hydrogencarbonate, sodium hydrogencarbonate, potassium phosphate, triethylamine and the like to give compound [31].

Step 2

The compound [31] obtained in the same manner as in the above-mentioned Production Method is reacted in an alcohol solvent such as methanol, ethanol and the like or a mixed solvent of an alcohol solvent and a solvent such as DMF, acetonitrile, THF, chloroform, dichloromethane, ethyl acetate, methylene chloride, toluene and the like in the presence of a base such as potassium carbonate, sodium carbonate, lithium hydroxide, sodium hydroxide, potassium hydroxide, lithium hydride, sodium hydride,

potassium hydride and the like at room temperature or with heating for deprotection, and reacted with compound [32] obtained in the same manner as in Step 1 of Production Method 1-1 in the same manner as in Step 1 of Production Method 5 to give compound 5 [33].

Step 3

The compound [33] obtained in the same manner as in the above-mentioned Production Method was subjected to cyclization in a solvent such as DMF, acetonitrile, THF, chloroform,

dichloromethane, ethyl acetate, methylene chloride, toluene and the like in the presence of a copper catalyst such as copper(I) iodide and the like or a palladium catalyst such as palladium(II) chloride and the like at room temperature or with heating to give compound [II-2-15].

15 Production Method 6

Formation of imidazo[1,2-a]pyridine ring

wherein R^{c16} and R^{c17} are each independently alkyl, such as methyl, ethyl and the like, and other symbols are as defined above.

20 Step 1

The compound [34] obtained by the above-mentioned Production Method or a conventional method is subjected to amide

condensation with compound [35] in the same manner as in Step 3 of Production Method 1-1 to give compound [36].

Step 2

The compound [36] obtained by the above-mentioned Production
5 Method is reacted with Grignard reagent [37] obtained by a
conventional method to give compound [38].

Alternatively, an acid halide of compound [34] may be used instead of compound [36].

Step 3

The compound [38] obtained by the above-mentioned Production Method is subjected to halogenation by a conventional method to give compound [39].

For example, when Hal is a bromine atom, compound [38] is reacted with bromine under cooling or at room temperature in a solvent such as DMF, acetonitrile, THF, chloroform, dichloromethane, ethyl acetate, toluene and the like to give compound [39].

Alternatively, a halogenating agent such as hypohalite (e.g., hypochlorite and the like), N-bromosuccinimide and the like may be used instead of bromine for halogenation.

Step 4

The compound [39] obtained by the above-mentioned Production Method is subjected to cyclization with compound [40] obtained by a conventional or known method (JP-A-8-48651) in the presence of a base such as potassium carbonate, sodium carbonate, lithium hydroxide, sodium hydroxide, potassium hydroxide, lithium hydride, sodium hydride, potassium hydride and the like in a solvent or without a solvent at room temperature or with heating to give compound [II-2-16].

In the compounds of the formulas [I] and [II], a desired heterocyclic group can be formed according to a method similar to the methods disclosed in known publications. Examples of such heterocyclic group and reference publications are recited in the following.

 $5-0x0-\Delta^2-1$, 2, 4-0xadiazolin-3-yl (or 2, 5-dihydro-5-0xo-4H-1, 2, 4-0xadiazol-3-yl), $5-0x0-\Delta^2-1$, 2, 4-thiadiazolin-3-yl (or 2, 5-dihydro-5-0x0-4H-1, 2, 4-thiadiazol-3-yl), $2-0x0-\Delta^3-1$, 2, 3, 5-0xathiadiazolin-1

```
4-yl (or 2-oxo-\Delta^3-1,2,4-oxathiadiazol-4-yl): Journal of Medicinal Chemistry, 39(26), 5228-35, 1996,
```

 $5-\infty$ - Δ^2-1 , 2, 4-triazolin-3-yl: J Org Chem, 61 (24), 8397-8401, 1996,

- 5 1- ∞ 0- Δ 3-1,2,3,5-thiatriazolin-4-yl: Liebigs Ann Chem, 1376, 1980, 3- ∞ 0- Δ 4-1,2,4- ∞ 0-adiazolin-5-yl: EP145095,
 - $5-\infty$ o $-\Delta^2-1$, 3, 4-oxadiazolin-2-yl: J Org Chem, 20, 412, 1955,
 - $5-oxo-\Delta^3-1$, 2, 4-dioxazolin-3-yl: J Prakt Chem, 314, 145, 1972,
 - $3-0x0-\Delta^4-1$, 2, 4-thiadiazolin-5-yl: JP-A-61-275271,
- 10 5- ∞ - Δ^3 -1,2,4-dithiazolin-3-yl: J Org Chem, 61(19), 6639-6645, 1996,
 - $2-\infty$ - Δ^4 -1,3,4-dioxazolin-5-yl: J Org Chem, 39, 2472, 1974, $2-\infty$ - Δ^4 -1,3,4-oxathiazolin-5-yl: J Med Chem, 35(20), 3691-98, 1992,
- 5- ∞ - Δ^2 -1,3,4-thiadiazolin-2-yl: J Prakt Chem, 332(1), 55, 1990, 5- ∞ - Δ^2 -1,4,2- ∞ - Δ -1,4,2- ∞ - Δ -1: J Org Chem, 31, 2417, 1966, 2- ∞ - Δ -1,3,4-dithiazolin-5-yl: Tetrahedron Lett, 23, 5453, 1982, 2- ∞ - Δ -1,3,2,4-dioxathiazolin-5-yl: Tetrahedron Lett, 319, 1968,
 - 3,5-dioxoisooxazolidin-4-yl: Helv Chim Acta, 1973, 48, 1965,
- 20 2,5-dioxoimidazolidin-4-yl: Heterocycles, 43(1), 49-52, 1996,
 - 5-oxo-2-thioxoimidazolidin-4-yl: Heterocycles, 5, 391, 1983,
 - 2,4-dioxooxazolidin-5-yl: J Am Chem Soc, 73, 4752, 1951,
 - 4-oxo-2-thioxooxazolidin-5-yl: Chem Ber, 91, 300, 1958,
 - 2,4-dioxothiazolidin-5-yl: JP-A-57-123175,
- 25 4-oxo-2-thioxothiazolidin-5-yl: Chem Pharm Bull, 30, 3563, 1982,

The Production Methods shown in the above-mentioned Production Methods 2 to 4 can be used for the synthesis of compounds other than benzimidazole of the formulas [I] and [II], such as compounds [II-2-15] and [II-2-16].

The compounds of the formulas [I], [II] and [III], 4-(4-fluorophenyl)-5-hydroxymethyl-2-methylthiazole and 4-(4-fluorophenyl)-5-chloromethyl-2-methylthiazole and production methods thereof of the present invention are explained in detail in the following by way of Examples. It is needless to say that the present invention is not limited by these Examples.

Example 1

Production of ethyl 2-[4-(3-bromophenoxy)phenyl]-1-cyclohexylbenzimidazole-5-carboxylate

Step 1: Production of ethyl 4-chloro-3-nitrobenzoate

4-Chloro-3-nitrobenzoic acid (300 g) was dissolved in ethyl alcohol (1500 ml) and concentrated sulfuric acid (100 ml) was added with ice-cooling. The mixture was refluxed under heating for 7 hr. The reaction mixture was poured into ice-cold water and the precipitated crystals were collected by filtration to give the title compound (332 g, yield 97%).

1H-NMR (300MHz, CDCl₃): 8.50(1H, d, J=2.1Hz), 8.16(1H, dd, J=8.4,

¹H-NMR (300MHz, CDCl₃): 8.50(1H, d, J=2.1Hz), 8.16(1H, dd, J=8.4, 2.1Hz), 7.63(1H, d, J=8.4Hz), 4.43(2H, q, J=7.5Hz), 1.42(3H, t, J=7.5Hz)

Step 2: Production of ethyl 4-cyclohexylamino-3-nitrobenzoate

Ethyl 4-chloro-3-nitrobenzoate (330 g) obtained in the
previous step was dissolved in acetonitrile (1500 ml), and
cyclohexylamine (220 g) and triethylamine (195 g) were added. The

mixture was refluxed under heating overnight. The reaction
mixture was poured into ice-cold water and the precipitated
crystals were collected by filtration to give the title compound
(400 g, yield 94%).

¹H-NMR (300MHz, CDCl₃): 8.87(1H, d, J=2.1Hz), 8.35-8.46(1H, m), 20 8.02(1H, dd, J=9.1, 2.1Hz), 6.87(1H, d, J=9.1Hz), 4.35(2H, q, J=7.1Hz), 3.65-3.50(1H, m), 2.14-1.29(10H, m), 1.38(3H, t, J=7.1Hz)

Step 3: Production of ethyl 3-amino-4-cyclohexylaminobenzoate

Ethyl 4-cyclohexylamino-3-nitrobenzoate (400 g) obtained in

the previous step was dissolved in ethyl acetate (1500 ml) and
ethyl alcohol (500 ml), and 7.5% palladium carbon (50% wet, 40 g)
was added. The mixture was hydrogenated for 7 hr at atmospheric
pressure. The catalyst was filtered off and the filtrate was
concentrated under reduced pressure. Diisopropyl ether was added

to the residue and the precipitated crystals were collected by
filtration to give the title compound (289 g, yield 80%).

1H-NMR (300MHz, CDCl₃): 7.57(1H, dd, J=8.4, 1.9Hz), 7.41(1H, d,
J=1.9Hz), 6.59(1H, d, J=8.4Hz), 4.30(2H, q, J=7.1Hz), 3.403.30(1H, m), 2.18-2.02(2H, m), 1.88-1.15(8H, m), 1.35(3H, t,

J=7.1Hz)

Step 4: Production of ethyl 3-[4-(3-bromophenoxy)benzoyl]amino-4-cyclohexylaminobenzoate

4-(3-Bromophenoxy) benzoic acid (74 g) was dissolved in chloroform (500 ml), and oxalyl chloride (33 ml) and dimethylformamide (catalytic amount) were added. The mixture was stirred for 4 hr at room temperature. The reaction mixture was 5 concentrated under reduced pressure and dissolved in dichloromethane (150 ml). The resulting solution was added dropwise to a solution of ethyl 3-amino-4-cyclohexylaminobenzoate (66 g) obtained in the previous step in dichloromethane (500 ml) and triethylamine (71 ml), and the mixture was stirred for 1 hr 10 at room temperature. The reaction mixture was poured into water and extracted with dichloromethane. The organic layer was washed with saturated brine, dried over anhydrous magnesium sulfate, and concentrated under reduced pressure. Diethyl ether was added to the residue for crystallization and the crystals were collected 15 by filtration to give the title compound (129 g, yield 95%). ¹H-NMR (300MHz, CDCl₃): 8.00-7.78(4H, m), 7.66(1H, brs), 7.37-7.18(3H, m), 7.13-6.59(3H, m), 6.72(1H, d, J=8.7Hz), 4.50(1H, brs), 4.29(2H, q, J=7.2Hz), 3.36(1H, m), 2.12-1.96(2H, m), 1, 83-1.56(3H, m), 1.47-1.12(5H, m), 1.37(3H, t, J=7.2Hz)

20 **Step 5:** Production of ethyl 2-[4-(3-bromophenoxy)phenyl]-1-cyclohexylbenzimidazole-5-carboxylate

Ethyl 3-[4-(3-bromophenoxy)benzoyl]amino-4cyclohexylaminobenzoate (129 g) obtained in the previous step was
suspended in acetic acid (600 ml) and the resulting suspension

25 was refluxed under heating for 3 hr. The reaction mixture was
concentrated under reduced pressure. Water was added to the
residue and the precipitated crystals were collected by
filtration to give the title compound (124 g, yield 99%).

1 H-NMR (300MHz, CDCl₃): 8.51(1H, d, J=1.5Hz), 8.00(1H, dd, J=8.4,

30 1.5Hz), 7.67(1H, d, J=8.4Hz), 7.63(2H, d, J=8.7Hz), 7.35-7.21(3H,
m), 7.17(2H, d, J=8.7Hz), 7.14(1H, m), 4.42(2H, q, J=7.2Hz),

4.38(1H, m), 2.43-2.22(2H, m), 2.07-1.87(4H, m), 1.80(1H, m),
1.42(3H, t, J=7.2Hz), 1.40-1.27(3H, m)

Example 2

35 Production of 2-[4-(3-bromophenoxy)phenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid

Ethyl 2-[4-(3-bromophenoxy)phenyl]-1-cyclohexylbenzimidazole-5-carboxylate (1.0 g) obtained in Example 1 was dissolved in tetrahydrofuran (10 ml) and ethyl alcohol (10 ml), and 4N sodium hydroxide (10 ml) was added. The mixture was refluxed under heating for 1 hr. The reaction mixture was concentrated under reduced pressure and water was added to the residue. The mixture was acidified with 6N hydrochloric acid and the precipitated crystals were collected by filtration to give the title compound (0.9 g, yield 96%).

melting point: 255-256°C

FAB-Ms: 491 (MH+)

15 Production of ethyl 1-cyclohexyl-2-(4hydroxyphenyl)benzimidazole-5-carboxylate

Ethyl 3-amino-4-cyclohexylaminobenzoate (130 g) obtained in Example 1, Step 3, and methyl 4-hydroxybenzimidate hydrochloride (139 g) were added to methyl alcohol (1500 ml), and the mixture was refluxed under heating for 4 hr. The reaction mixture was allowed to cool and the precipitated crystals were collected by filtration to give the title compound (131 g, yield 72%).

1H-NMR (300MHz, CDCl₃): 10.02(1H, brs), 8.21(1H, d, J=1.4Hz), 7.93(1H, d, J=8.6Hz), 7.83(1H, dd, J=8.6, 1.4Hz), 7.48(2H, d, J=8.6Hz), 6.95(2H, d, J=8.6Hz), 4.39-4.25(1H, m), 4.33(1H, q, J=7.0Hz), 2.35-2.18(2H, m), 1.98-1.79(4H, m), 1.70-1.60(1H, m), 1.46-1.19(3H, m), 1.35(3H, t, J=7.0Hz)

Example 4

Production of ethyl 2-[4-(2-bromo-5-chlorobenzyloxy)phenyl]-130 cyclohexylbenzimidazole-5-carboxylate

2-Bromo-5-chlorobenzyl bromide prepared from 2-bromo-5-chlorotoluene (50 g), N-bromosuccinimide and N,N'-azobisisobutyronitrile, and ethyl 1-cyclohexyl-2-(4-hydroxyphenyl)benzimidazole-5-carboxylate (50 g) obtained in Example 3 were suspended in dimethylformamide (300 ml). Potassium carbonate (38 g) was added and the mixture was stirred for 1 hr at 80°C with heating. The reaction mixture was allowed to cool and then added to a mixed solvent of water-ethyl acetate. The

precipitated crystals were collected by filtration to give the title compound (50 g, yield 64%).

¹H-NMR (300MHz, CDCl₃): 8.50(1H, d, J=1.4Hz), 7.97(1H, dd, J=8.6, 1.4Hz), 7.70-7.57(5H, m), 7.20(1H, dd, J=8.4, 2.5Hz), 7.14(2H, d, J=8.7Hz), 5.17(2H, s), 4.46-4.30(1H, m), 4.41(2H, q, J=7.1Hz), 2.40-2.20(2H, m), 2.02-1.21(8H, m), 1.42(3H, t, J=7.1Hz)

Example 5

10

Production of ethyl 2-{4-[2-(4-chlorophenyl)-5-chlorobenzyloxy]-phenyl}-1-cyclohexylbenzimidazole-5-carboxylate

- Ethyl 2-[4-(2-bromo-5-chlorobenzyloxy)phenyl]-1-cyclohexylbenzimidazole-5-carboxylate (49 g) obtained in Example 4, 4-chlorophenylboronic acid (18 g) and tetrakis-(triphenylphosphine)palladium (10 g) were suspended in 1,2-dimethoxyethane (600 ml). Saturated aqueous sodium
- 15 hydrogencarbonate solution (300 ml) was added and the mixture was refluxed under heating for 2 hr. Chloroform was added to the reaction mixture. The organic layer was washed successively with saturated aqueous sodium hydrogencarbonate solution, water and saturated brine, dried over anhydrous magnesium sulfate, and
- concentrated under reduced pressure. The residue was purified by silica gel flash chromatography (developing solvent, chloroform:ethyl acetate = 97:3). Ethyl acetate and diisopropyl ether were added to the resulting oil for crystallization and the resulting crystals were collected by filtration to give the title compound (44 g, yield 85%).

¹H-NMR (300MHz, CDCl₃): 8.49(1H, d, J=1.4Hz), 7.97(1H, dd, J=8.6, 1.6Hz), 7.70-7.60(2H, m), 7.55(2H, d, J=8.7Hz), 4.95(2H, s), 4.48-4.28(1H, m), 4.40(2H, m), 2.02-1.20(8H, m), 1.41(3H, t, J=7.1Hz)

30 Example 6

Production of 2-{4-[2-(4-chlorophenyl)-5-chlorobenzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid

Ethyl 2-{4-[2-(4-chlorophenyl)-5-chlorobenzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylate (43 g) obtained in Example 5 was treated in the same manner as in Example 2 to give the title compound (33 g, yield 76%).

melting point: 243-244°C

FAB-Ms: 571 (MH+)

¹H-NMR (300MHz, DMSO-d₆): 8.32(1H, s), 8.28(1H, d, J=8.9Hz), 8.05(1H, d, J=8.8Hz), 7.76-7.72(3H, m), 7.58-7.46(5H, m), 7.40(1H, d, J=8.3Hz), 7.24(2H, d, J=8.9Hz), 5.11(2H, s), 4.36(1H, m), 2.40-2.15(2H, m), 2.15-1.95(2H, m), 1.95-1.75(2H, m), 1.75-5 1.55(1H, m), 1.55-1.15(3H, m)

Example 7

Production of ethyl 2-[4-(2-bromo-5-methoxybenzyloxy)phenyl]-1-cyclohexylbenzimidazole-5-carboxylate

Ethyl 1-cyclohexyl-2-(4-hydroxyphenyl)benzimidazole-5carboxylate obtained in Example 3 and 2-bromo-5-methoxybenzyl
bromide were treated in the same manner as in Example 4 to give
the title compound (59 g).

Example 8

Production of ethyl 2-{4-[2-(4-chlorophenyl)-5-methoxybenzyloxy]
phenyl}-1-cyclohexylbenzimidazole-5-carboxylate

Ethyl 2-[4-(2-bromo-5-methoxybenzyloxy)phenyl]-1-cyclohexylbenzimidazole-5-carboxylate obtained in Example 7 was treated in the same manner as in Example 5 to give the title compound (48 g, yield 77%).

Example 9

Production of 2-{4-[2-(4-chlorophenyl)-5-methoxybenzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid

Ethyl 2-{4-[2-(4-chlorophenyl)-5-methoxybenzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylate (52 g) obtained in Example 8 was treated in the same manner as in Example 2 to give the title compound (44 g, yield 89%).

melting point: 248-249°C

35 FAB-Ms: 568 (MH+)

 1 H-NMR (300MHz, DMSO-d₆): 8.20(1H, s), 7.88(1H, d, J=8.7Hz), 7.85(1H, d, J=8.7Hz), 7.57(d, 2H, J=8.6Hz), 7.46(2H, d, J=8.6Hz), 7.44(2H, d, J=8.6Hz), 7.29(1H, d, J=8.5Hz), 7.24(1H, d, J=2.6Hz),

7.11(2H, d, J=8.6Hz), 7.06(1H, dd, J=8.5, 2.6Hz), 5.04(2H, s), 4.26(1H, m), 3.83(3H, s), 2.38-2.29(2H, m)

Example 10

Production of ethyl 1-cyclohexyl-2-{4-[(E)-2-phenylvinyl]phenyl}
benzimidazole-5-carboxylate

Ethyl 3-amino-4-cyclohexylaminobenzoate (500 mg) obtained in Example 1, Step 3, was dissolved in methyl alcohol (6 ml) and trans-4-stilbenecarbaldehyde (397 mg) was added under ice-cooling. The mixture was stirred overnight at room temperature. The reaction mixture was ice-cooled and benzofuroxan (259 mg) dissolved in acetonitrile (2 ml) was added. The mixture was stirred for 7 hr at 50°C. The reaction mixture was ice-cooled. After 1N sodium hydroxide (0.1 ml) was added, ethyl acetate was added and the mixture was extracted. The organic layer was washed with water and saturated brine, dried over anhydrous magnesium sulfate, and concentrated under reduced pressure. The residue was purified by silica gel flash chromatography (developing solvent, n-hexane:ethyl acetate = 4:1) to give the title compound (540 mg, yield 63%).

20 ¹H-NMR (300MHz, DMSO-d₆): 8.28(1H, d, J=1.4Hz), 8.01(1H, d, J=8.7Hz), 7.90-7.80(3H, m), 7.75-7.65(4H, m), 7.50-7.25(5H, m), 4.35(2H, q, J=7.0Hz), 4.31(1H, m), 2.40-2.20(2H, m), 2.00-1.80(4H, m), 1.63(1H, m), 1.40-1.20(3H, m), 1.36(3H, t, J=7.0Hz)

Example 11

25 Production of 1-cyclohexyl-2-{4-[(E)-2-phenylvinyl]phenyl}-benzimidazole-5-carboxylic acid

Ethyl 1-cyclohexyl-2-{4-[(E)-2-phenylvinyl]phenyl}benzimidazole-5-carboxylate (127 mg) obtained in Example 10 was
treated in the same manner as in Example 2 to give the title
compound (116 mg, yield 97%).

melting point: not lower than 300°C FAB-Ms: 423(MH+)

¹H-NMR (300MHz, DMSO-d₆): 8.25(1H, s), 7.96-7.29(13H, m), 4.33(1H, brt), 2.41-2.23(2H, m), 2.03-1.78(4H, m), 1.71-1.59(1H, m), 1.49-35 1.20(3H, m)

Example 12

Production of 2-(4-benzyloxyphenyl)-1-cyclopentylbenzimidazole-5-carboxylic acid

In the same manner as in Examples 1 and 2, the title compound (700 mg) was obtained.

FAB-Ms: 413 (MH+)

¹H-NMR (300MHz, CDCl₃): 8.60(1H, s), 8.04(1H, d, J=9.0Hz), 7.63(2H, 5 d, J=8.4Hz), 7.51-7.32(6H, m), 7.14(2H, d, J=9.0Hz), 5.16(2H, s), 5.03-4.89(1H, m), 2.41-1.63(8H, m)

Example 13

Production of 2-(4-benzyloxyphenyl)-1-cyclopentylbenzimidazole-5-carboxamide

- 2-(4-Benzyloxyphenyl)-1-cyclopentylbenzimidazole-5-carboxylic acid (700 mg) obtained in Example 12 was dissolved in dimethylformamide (10 ml), and ammonium chloride (108 mg), 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide hydrochloride (390 mg), 1-hydroxybenzotriazole (275 mg) and triethylamine (0.3 ml)
- Water was added to the reaction mixture and the mixture was extracted with ethyl acetate. The organic layer was washed successively with saturated aqueous sodium hydrogencarbonate, water and saturated brine, dried over anhydrous magnesium sulfate,
- and concentrated under reduced pressure. Ethyl acetate and disopropyl ether were added to the residue for crystallization and the crystals were collected by filtration to give the title compound (571 mg, yield 81%).

melting point: 232-233°C

25 FAB-Ms: 412 (MH+)

¹H-NMR (300MHz, CDCl₃): 8.23(1H, d, =1.5Hz), 7.86(1H, dd, J=8.5, 1.5Hz), 7.65-7.30(8H, m), 7.13(2H, d, J=8.8Hz), 5.16(2H, s), 4.93(1H, quint, J=8.8Hz), 2.40-1.60(8H, m)

Example 14

30 Production of 2-(4-benzyloxyphenyl)-5-cyano-1cyclopentylbenzimidazole

In the same manner as in Example 1, the title compound (400 mg) was obtained.

FAB-Ms: 394 (MH+)

35 ¹H-NMR (300MHz, CDCl₃): 8.11(1H, s), 7.68-7.30(9H, m), 7.13(2H, s), 5.16(2H, s), 4.94(1H, quint, J=8.9Hz), 2.35-1.60(8H, m)

Example 15

Production of 2-(4-benzyloxyphenyl)-1-cyclopentylbenzimidazole-5-carboxamide oxime

2-(4-Benzyloxyphenyl)-5-cyano-1-cyclopentylbenzimidazole (400 mg) obtained in Example 14 was suspended in ethyl alcohol (3 ml) and water (1.5 ml), and hydroxylamine hydrochloride (141 mg) and sodium hydrogencarbonate (170 mg) were added. The mixture was refluxed under heating overnight. The reaction mixture was allowed to cool and the precipitated crystals were collected by filtration to give the title compound (312 mg, yield 71%).

nelting point: 225-226°C

FAB-Ms: 456 (MH+)

 1 H-NMR (300MHz, DMSO-d₆): 8.20(1H, s), 7.50-7.31(9H, m), 7.12(2H, d, J=8.7Hz), 5.15(2H, s), 4.94(1H, quint, J=8.7Hz), 3.61(3H, s), 3.40(3H, s), 2.41-1.42(8H, m)

15 Example 16

Production of ethyl 1-cyclohexyl-2-{4-[{4-(4-fluorophenyl)-2-methyl-5-thiazolyl}methoxy]phenyl}benzimidazole-5-carboxylate **Step 1:** Production of 4-(4-fluorophenyl)-5-hydroxymethyl-2-methylthiazole

20 Ethyl 4-(4-fluorophenyl)-2-methyl-5-thiazolecarboxylate (59 g) prepared by a known method (Chem. Pharm. Bull., 43(6), 947, 1995) was dissolved in tetrahydrofuran (700 ml). Lithium aluminum hydride (13 g) was added under ice-cooling and the mixture was stirred for 30 min. Water (13 ml), 15% sodium hydroxide (13 ml) and water (39 ml) were added successively to the reaction mixture, and the precipitated insoluble materials were filtered off. The filtrate was concentrated under reduced pressure to give the title compound (37 g, yield 71%).

¹H-NMR (300MHz, CDCl₃): 7.60(2H, dd, J=8.7, 6.6Hz), 7.11(2H, t, 30 J=8.7Hz), 4.80(2H, s), 2.70(3H, s)

Step 2: Production of 5-chloromethyl-4-(4-fluorophenyl)-2-methylthiazole

4-(4-Fluorophenyl)-5-hydroxymethyl-2-methylthiazole (37 g) obtained in the previous step was dissolved in chloroform (500 35 ml), and thionyl chloride (24 ml) and pyridine (2 ml) were added. The mixture was stirred for 3 hr at room temperature. The reaction mixture was poured into ice-cold water. The mixture was extracted with chloroform, and washed with water and saturated

brine. The organic layer was dried over sodium sulfate, and concentrated under reduced pressure to give the title compound (29 g, yield 76%).

¹H-NMR (300MHz, CDCl₃): 7.67(2H, dd, J=8.8, 5.4Hz), 7.16(2H, t, 5 J=8.7Hz), 4.79(2H, s), 2.73(3H, s)

Step 3: Production of ethyl 1-cyclohexyl-2-{4-[4-(4-fluorophenyl)-4-methyl-5-thiazolyl/methoxy]phenyl}benzimidazole-5-carboxylate

5-Chloromethyl-4-(4-fluorophenyl)-2-methylthiazole (28 g)

10 obtained in the previous step and ethyl 1-cyclohexyl-2-(4-hydroxyphenyl)benzimidazole-5-carboxylate (36 g) obtained in Example 3 were treated in the same manner as in Example 4 to give the title compound (61 g, yield 100%).

APCI-Ms: 570(MH+)

Example 17

Production of 1-cyclohexyl-2- $\{4-[\{4-(4-fluorophenyl)-2-methyl-5-thiazolyl\}$ methoxy]phenyl $\{benzimidazole-5-carboxylic acid\}$

Ethyl 1-cyclohexyl-2-4-[4-(4-fluorophenyl)-4-methyl-5-

25 thiazolyl methoxy] phenyl benzimidazole-5-carboxylate (60 g) obtained in Example 16 was treated in the same manner as in Example 2 to give the title compound (39g, yield 69%).

melting point: 196-198°C

FAB-Ms: 542 (MH+)

³⁰ ¹H-NMR (300MHz, DMSO-d₆): 13.1(1H, brs), 8.34(1H, s), 8.29(1H, d, J=8.8Hz), 8.06(1H, d, J=8.7Hz), 7.80-7.72(4H, m), 7.36-7.31(4H, m), 5.46(2H, s), 4.38(1H, m), 2.72(3H, s), 2.45-2.15(2H, m), 2.15-1.95(2H, m), 1.95-1.75(2H, m), 1.75-1.55(1H, m), 1.55-1.20(3H, m)

35 Example 18

Production of ethyl 1-cyclohexyl-2-(2-fluoro-4-hydroxyphenyl)-benzimidazole-5-carboxylate

In the same manner as in Example 3, the title compound (50 g) was obtained.

Example 19

30

Production of ethyl $2-\frac{4}{9}$ [bis(3-fluorophenyl)methoxy]-2-5 fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylate Step 1 : Production of 3,3'-difluorobenzhydrol

To a stirred solution of magnesium strip (35.4 g) in THF (200 ml), iodine strip was added and the mixture was heated with stirring under nitrogen stream until most of color of iodine was 10 disappeared. A solution of 3-fluoro-bromobenzene (250.0 g) in THF (1000 ml) was added dropwise over 2.5 hr while the temperature of the solution was maintained at 60°C. After the completion of the addition of the solution, the resulting mixture was refluxed for 1 hr with heating. The resulting Grignard solution was ice-cooled 15 and a solution of ethyl formate (63.2 g) in THF (200 ml) was added dropwise over 1 hr. After a stirring of the reaction solution for an additional 30 min, saturated aqueous ammonium chloride solution (700 ml) was added dropwise with ice-cooling and water (300 ml) was added. The mixture was stirred for 10 min. 20 The organic layer and water layer were separated. Water layer was extracted with ethyl acetate, and the combined organic layer was washed with 2N hydrochloric acid, saturated aqueous sodium hydrogencarbonate and saturated brine. The organic layer was

dried over anhydrous magnesium sulfate, filtered, and the solvent 25 was evaporated off under reduced pressure to give the title compound (156.2 g, yield 99%).

 1 H-NMR (300MHz, CDCl₃): 7.31(2H, td, J=7.9, 5.8Hz), 7.15-7.80(4H, m), 6.97-6.94(2H, m), 5.82(1H, d, J=3.3Hz), 2.30(1H, d, J=3.3Hz) Step 2: Production of 3,3'-difluorobenzhydryl chloride

To a solution of 3,3'-difluorobenzhydrol (150.0 g) obtained in the previous step in toluene (400 ml), pyridine (539 mg) was added at room temperature. To the solution, thionyl chloride (89.1 q) was added dropwise over 1 hr at room temperature and the resulting solution was stirred for an additional 2 hr. The 35 solution was heated so that the temperature of the solution was at 40°C, and then stirred for an additional 1.5 hr. Thionyl chloride (8.1 g) was added again and the mixture was stirred for 30 min. To the reaction mixture, water was added. The organic

layer was separated, and washed with water, saturated aqueous sodium hydrogencarbonate and saturated brine. The organic layer was dried over anhydrous magnesium sulfate, filtered, the solvent was evaporated off under reduced pressure to give the title compound (158.2 g, yield 97%).

 1 H-NMR (300MHz, CDCl₃): 7.32(2H, td, J=8.0, 5.9Hz), 7.18-7.10(4H, m), 7.01(2H, tdd, J=8.2, 2.5, 1.2Hz), 6.05(1H, s)

Step 3: Production of ethyl 2-{4-[bis(3-fluorophenyl)methoxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylate

Ethyl 1-cyclohexyl-2-(2-fluoro-4-hydroxyphenyl) - benzimidazole-5-carboxylate (50 g) obtained in Example 18 and 3,3'-difluorobenzhydryl chloride (34 g) obtained in the previous step were treated in the same manner as in Example 4 to give the title compound (76 g, yield 99%).

15 FAB-Ms: 585 (MH+)

10

¹H-NMR (300MHz, DMSO-d₆): 8.24(1H, d, J=1.4Hz), 7.98(1H, d, J=8.7Hz), 7.88(1H, d, J=8.7Hz), 7.56(1H, t, J=8.6Hz), 7.50-7.40(6H, m), 6.82(1H, s), 4.34(2H, q, J=7.1Hz), 3.95(1H, m), 2.20-2.10(2H, m), 1.90-1.80(4H, m), 1.6(1H, m), 1.35(3H, t, J=7.2Hz), 1.30-1.20(3H, mz)

Example 20

Production of 2-{4-(bis[3-fluorophenyl]methoxy)-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid

Ethyl 2-{4-[bis(3-fluorophenyl)methoxy]-2-fluorophenyl}-1
25 cyclohexylbenzimidazole-5-carboxylate (75 g) obtained in Example
19 was treated in the same manner as in Example 2 to give the
title compound (48 g, yield 62%).

melting point: 242-243°C

FAB-Ms: 557 (MH+)

30 ¹H-NMR (300MHz, DMSO-d₆): 8.29(1H, s), 8.16(1H, d, J=8.8Hz), 7.99(1H, d, J=8.7Hz), 7.66(1H, t, J=8.7Hz), 7.51-7.40(6H, m), 7.30(1H, d, J=12.1Hz), 7.20-7.14(3H, m), 6.88(1H, s), 4.07(1H, m), 2.40-2.10(2H, m), 2.00-1.75(4H, m), 1.70-1.55(1H, m), 1.50-1.15(3H, m)

35 Example 21

Production of ethyl 1-cyclopentyl-2-(4-nitrophenyl)benzimidazole-5-carboxylate

In the same manner as in Example 1, the title compound (12 g) was obtained.

Example 22

Production of ethyl 2-(4-aminophenyl)-1-cyclopentylbenzimidazole-5 5-carboxylate

Ethyl 1-cyclopentyl-2-(4-nitrophenyl)benzimidazole-5-carboxylate (12 g) obtained in Example 21 was dissolved in tetrahydrofuran (200 ml) and ethyl alcohol (50 ml), 7.5% palladium carbon (50% wet, 1 g) was added. The mixture was hydrogenated for 1 hr at atmospheric pressure. The catalyst was filtered off and the filtrate was concentrated under reduced pressure. Tetrahydrofuran was added to the residue to allow crystallization and the crystals were collected by filtration to give the title compound (11 g, yield 98%).

Example 23

20 Production of ethyl 2-(4-benzoylaminophenyl)-1-cyclopentylbenzimidazole-5-carboxylate

Ethyl 1-cyclopentyl-2-(4-aminophenyl)benzimidazole-5-carboxylate (300 mg) obtained in Example 22 was dissolved in pyridine (3 ml) and chloroform (3 ml), and benzoyl chloride (127 mg) was added. The mixture was stirred for 30 min at room temperature. The reaction mixture was concentrated under reduced pressure and water was added to the residue to allow crystallization. The crystals were collected by filtration to give the title compound (403 mg, yield 100%).

30 ¹H-NMR (300MHz, CDCl₃): 8.58(1H, s), 8.00(1H, d, J=9.0Hz), 7.84(2H, d, J=7.5Hz), 7.60-7.40(6H, m), 7.14(2H, d, J=7.5Hz), 4.84(1H, quint, J=8.7Hz), 4.41(2H, q, J=7.5Hz), 2.20-1.30(8H, m), 1.41(3H, t, J=7.5Hz)

Example 24

35 Production of 2-(4-benzoylaminophenyl)-1cyclopentylbenzimidazole-5-carboxylic acid

Ethyl 2-(4-benzoylaminophenyl)-1-cyclopentylbenzimidazole-5-carboxylate (200 mg) obtained in Example 23 was treated in the

same manner as in Example 2 to give the title compound (131 mg, yield 70%).

melting point: not lower than 300°C FAB-Ms: 426(MH+)

5 ¹H-NMR (300MHz, DMSO-d₆): 10.75(1H, s), 8.35(1H, s), 8.15and7.85(4H, ABq, J=8.9Hz), 8.10-7.98(4H, m), 7.70-7.55(3H, m), 5.02(1H, quint, J=8.7Hz), 2.36-2.15(4H, m), 2.14-1.95(2H, m), 1.80-1.62(2H, m)

Example 25

10 Production of ethyl 2-{4-[3-(3-chlorophenyl)phenoxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylate

Ethyl 2-[4-(3-bromophenoxy)phenyl]-1-

cyclohexylbenzimidazole-5-carboxylate (65 g) obtained in Example 1 and 3-chlorophenylboronic acid (23 g) were treated in the same 15 manner as in Example 5 to give the title compound (59 g, yield 85%).

¹H-NMR (300MHz, CDCl₃): 8.51(1H, d, J=1.8Hz), 7.99(1H, dd, J=8.7, 1.8Hz), 7.71-7.55(4H, m), 7.51-7.43(2H, m), 7.43-7.27(4H, m), 7.19(1H, d, J=8.4Hz), 7.12(1H, m), 4.41(2H, q, J=7.2Hz), 4.39(1H, m), 2.42-2.22(2H, m), 2.03-1.87(4H, m), 1.79(1H, m), 1.42(3H, t, J=7.2Hz), 1.39-1.29(3H, m)

Example 26

Production of 2-{4-[3-(3-chlorophenyl)phenoxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid

25 Ethyl 2-{4-[3-(3-chlorophenyl)phenoxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylate (59 g) obtained in Example 25 was treated in the same manner as in Example 2 to give the title compound (43 g, yield 76%).

melting point: 253-254°C

30 FAB-Ms: 523 (MH+)

 $^{1}\text{H-NMR} \ (300\text{MHz}, \ DMSO-d_{6}): \ 12.82(1\text{H}, \ brs), \ 8.24(1\text{H}, \ d, \ J=1.3\text{Hz}), \\ 7.98(1\text{H}, \ d, \ J=8.7\text{Hz}), \ 7.89(1\text{H}, \ dd, \ J=8.7, \ 1.3\text{Hz}), \ 7.78(1\text{H}, \ s), \\ 7.72(2\text{H}, \ d, \ J=9.7\text{Hz}), \ 7.70(1\text{H}, \ m), \ 7.64-7.42(5\text{H}, \ m), \ 7.25(2\text{H}, \ d, \ J=8.7\text{Hz}), \ 7.20(1\text{H}, \ m), \ 4.33(1\text{H}, \ m), \ 2.39-2.17(2\text{H}, \ m), \ 2.00-$

35 1.76(4H, m), 1.65(1H, m), 1.50-1.22(3H, m)

Example 27

Production of ethyl 2-[4-(3-acetoxyphenyloxy)phenyl]-1-cyclohexylbenzimidazole-5-carboxylate

In the same manner as in Example 1, the title compound (87 g) was obtained.

Example 28

Production of ethyl 1-cyclohexyl-2-[4-(3-hydroxyphenyloxy)-5 phenyl]benzimidazole-5-carboxylate

Ethyl 2-[4-(3-acetoxyphenyloxy)phenyl]-1cyclohexylbenzimidazole-5-carboxylate (87 g) obtained in Example
27 was dissolved in methyl alcohol (250 ml) and tetrahydrofuran
(250 ml), and potassium carbonate (31 g) was added. The mixture
was stirred for 30 min at room temperature. The insoluble
materials were filtered off and the filtrate was concentrated
under reduced pressure. Water was added to the residue and the
mixture was neutralized with 2N hydrochloric acid. The
precipitated crystals were collected by filtration to give the
title compound (78 g, yield 97%).

¹H-NMR (300MHz, DMSO-d₆): 9.71(1H, s), 7.98(1H, d, J=8.7Hz), 7.87(1H, d, J=8.7Hz), 7.68(2H, d, J=8.6Hz), 7.24(1H, t, J=8.1Hz), 7.18(2H, d, J=8.6Hz), 6.63(1H, d, J=8.1Hz), 6.57(1H, d, J=8.1Hz), 6.51(1H, s), 4.38-4.23(1H, m), 4.35(2H, q, J=6.9Hz), 2.36-2.18(2H, m), 1.99-1.78(4H, m), 1.71-1.59(1H, m), 1.45-1.20(3H, m), 1.36(3H, t, J=6.9Hz)

Example 29

Production of ethyl 1-cyclohexyl-2-{4-[3-(4-pyridylmethoxy)-phenyloxy]phenylbenzimidazole-5-carboxylate

Ethyl 1-cyclohexyl-2-[4-(3-hydroxyphenyloxy)phenyl]benzimidazole-5-carboxylate (78 g) obtained in Example 28 was
suspended in dimethylformamide (800 ml), and sodium hydride (60%
oil, 14 g) was added under ice-cooling. The mixture was stirred
for 1 hr at room temperature. After the reaction mixture was icecooled, 4-chloromethylpyridine hydrochloride (29 g) was added and
the mixture was stirred for 30 min. The mixture was then stirred
overnight at room temperature. Water was added to the reaction
mixture and the precipitated crystals were collected by
filtration. The resulting crystals were recrystallized from ethyl
alcohol to give the title compound (77 g, yield 82%).

1H-NMR (300MHz, CDCl₃): 8.63(2H, d, J=6.0Hz), 8.51(1H, s), 7.99(1H,
d, J=8.7Hz), 7.66(2H, d, J=8.7Hz), 7.62(2H, d, J=8.7Hz), 7.36(2H,
d, J=8.7Hz), 7.31(1H, t, J=8.2Hz), 7.26(1H, s), 7.16(2H, d,

J=8.7Hz), 6.79-6.70(3H, m), 5.09(2H, s), 4.47-4.31(1H, m), 4.42(2H, q, J=7.0Hz), 2.42-2.22(2H, m), 2.04-1.71(5H, m), 1.45-1.25(3H, m), 1.42(3H, t, J=7.0Hz)

Example 30

5 Production of 1-cyclohexyl-2-{4-[3-(4-pyridylmethoxy)phenyloxy]-phenylbenzimidazole-5-carboxylic acid

Ethyl 1-cyclohexyl-2-{4-[3-(4-pyridylmethoxy)phenyloxy]-phenyl/benzimidazole-5-carboxylate (60 g) obtained in Example 29 was treated in the same manner as in Example 2 to give the title compound (54 g, yield 75%).

melting point: 235-237°C

FAB-Ms: 520 (MH+)

 1 H-NMR (300MHz, DMSO-d₆): 8.58(2H, d, J=6.0Hz), 8.23(1H, s), 7.96 and 7.86(2H, ABq, J=8.7Hz), 7.68 and 7.17(4H, A'B'q, J=8.7Hz),

15 7.44(2H, d, J=8.7Hz), 7.39(1H, t, J=8.3Hz), 6.90(1H, d, J=8.1Hz), 6.84(1H, s), 6.75(1H, d, J=8.1Hz), 5.22(2H, s), 4.40-4.22(1H, m), 2.40-2.19(2H, m), 2.00-1.80(4H, m)

Example 241

Production of methyl 2-{4-[2-(4-chlorophenyl)-5-

20 methoxybenzyloxy]phenyl \rangle -1-cyclohexylbenzimidazole-5-carboxylate
Step 1: Production of 2-bromo-5-methoxybenzaldehyde

3-Methoxybenzaldehyde (15 g) was dissolved in acetic acid (75 ml), and a solution of bromine (5.7 ml) dissolved in acetic acid (15 ml) was added dropwise. The mixture was stirred

overnight at room temperature and water (150 ml) was added to the reaction mixture. The precipitated crystals were collected by filtration, washed with water and dried under reduced pressure to give the title compound (21 g, yield 88%).

 1 H-NMR (300MHz, CDCl₃): 10.31(1H, s), 7.52(1H, d, J=8.8Hz),

30 7.41(1H, d, J=3.3Hz), 7.03(1H, dd, J=8.8, 3.3Hz), 3.48(3H, s)

Step 2: Production of 2-(4-chlorophenyl)-5-methoxybenzaldehyde

2-Bromo-5-methoxybenzaldehyde (10 g) obtained in the previous step was treated in the same method as in Example 5 to give the title compound (11 g, yield 96%).

 1 H-NMR (300MHz, CDCl₃): 9.92(1H, s), 7.50(1H, d, J=2.6Hz), 7.48-7.14(6H, m), 3.90(3H, s)

Step 3: Production of 2-(4-chlorophenyl)-5-methoxybenzyl alcohol

- 2-(4-Chlorophenyl)-5-methoxybenzaldehyde (10 g) obtained in the previous step was dissolved in tetrahydrofuran (30 ml). The solution was added dropwise to a suspension of sodium borohydride (620 mg) in isopropyl alcohol (50 ml) and the mixture was stirred for 1 hr. The solvent was evaporated under reduced pressure and water was added to the residue. The precipitated crystals were collected by filtration and dried under reduced pressure. The resulting crystals were recrystallized from a mixture of methanol and water to give the title compound (9.2 g, yield 91%).
- Step 4: Production of 2-(4-chlorophenyl)-5-methoxybenzyl chloride 2-(4-Chlorophenyl)-5-methoxybenzyl alcohol (20 g) obtained in the previous step was dissolved in ethyl acetate (100 ml) and pyridine (0.5 ml), and thionyl chloride (11 ml) was added dropwise. The mixture was stirred for 1 hr. Water was added to the reaction mixture and the mixture was extracted with ethyl acetate. The organic layer was washed with water, saturated aqueous sodium hydrogencarbonate, water and saturated brine, dried over anhydrous magnesium sulfate, and concentrated under reduced pressure. Isopropyl alcohol was added to the residue to allow crystallization. The resulting crystals were collected by
- 25 compound (16 g, yield 74%).

 1H-NMR (300MHz, CDCl₃): 7.43-7.29(4H, m), 7.17(1H, d, J=8.6Hz),
 7.05(1H, d, J=2.6Hz), 6.96-6.89(1H, m), 4.46(2H, s), 3.86(3H, s)

 Step 5: Production of methyl 2-{4-[2-(4-chlorophenyl)-5methoxybenzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylate

filtration and dried under reduced pressure to give the title

- 2-(4-Chlorophenyl)-5-methoxybenzyl chloride (4.0 g) obtained in the previous step and methyl 1-cyclohexyl-2-(4-hydroxyphenyl)-benzimidazole-5-carboxylate (5.0 g) obtained in the same manner as in Example 3 were treated in the same manner as in Example 4 to give the title compound (6.0 g, yield 72%).
- ¹H-NMR (300MHz, CDCl₃): 8.48(1H, s), 8.00-7.93(1H, m), 7.68-7.62(1H, m), 7.54(2H, d, J=9.0Hz), 7.41-7.16(6H, m), 7.04-6.93(3H, m), 4.97(2H, s), 4.36(1H, m), 3.94(3H, s), 3.87(3H, s), 2.39-2.21(2H, m), 2.02-1.88(4H, m), 1.85-1.45(4H, m)

Example 242

Production of 2-{4-[2-(4-chlorophenyl)-5-methoxybenzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride

Methyl 2-{4-[2-(4-chlorophenyl)-5-methoxybenzyloxy]phenyl}5 1-cyclohexylbenzimidazole-5-carboxylate (5.0 g) obtained in
Example 241 was treated in the same manner as in Example 2 to
give the title compound (5.1 g, yield 98%).

¹H-NMR (300MHz, DMSO-d₆): 8.30(1H, d, J=1.4Hz), 8.24(1H, d, J=8.7Hz), 8.03(1H, d, J=8.7Hz), 7.72(2H, d, J=8.7Hz), 7.51-7.39(4H, m), 7.34-7.18(4H, m), 7.11-7.03(1H, m), 5.08(2H, s), 4.35(1H, m), 3.83(3H, m), 2.40-2.18(2H, m), 2.10-1.96(2H, m), 1.93-1.78(2Hm), 1.72-1.18(4H, m)

Example 243

APCI-Ms: 568 (MH+)

Production of ethyl 2-{4-[3-(4-chlorophenyl)pyridin-2-ylmethoxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylate

Step 1: Production of methyl 3-hydroxypicolinate

3-Hydroxypicolinic acid (1.0 g) was suspended in methanol (10 ml) and concentrated sulfuric acid (1.0 ml) was added. The mixture was refluxed under heating for 5 hr. The reaction mixture was ice-cooled, neutralized with saturated aqueous sodium hydrogencarbonate, and extracted with chloroform. The organic layer was washed with water and saturated brine, and dried over anhydrous magnesium sulfate. The solvent was evaporated under reduced pressure to give the title compound (711 mg, yield 64%).

1H-NMR (300MHz, CDCl₃): 10.63(1H, s), 8.28(1H, dd, J=3.7, 1.8Hz), 7.47-7.35(2H, m), 4.06(3H, s)

Step 2: Production of methyl 3-(trifluoromethylsulfonyloxy)-pyridine-2-carboxylate

Methyl 3-hydroxypicolinate (710 mg) obtained in the previous step and triethylamine (0.77 ml) were dissolved in dichloromethane (7 ml), and trifluoromethanesulfonic anhydride (0.86 ml) was added under ice-cooling. The reaction mixture was allowed to warm to room temperature and the mixture was stirred for 2 hr. Water was added to the reaction mixture and the mixture was extracted with ethyl acetate. The organic layer was washed with saturated brine and dried over anhydrous magnesium sulfate.

The solvent was evaporated under reduced pressure to give the title compound (1.2 g, yield 90%).

¹H-NMR (300MHz, CDCl₃): 8.80-8.73(1H, m), 7.75-7.70(1H, m), 7.63(1H, dd, J=8.2, 4.5Hz), 4.05(3H, s)

5 Step 3: Production of methyl 3-(4-chlorophenyl)pyridine-2-carboxylate

Methyl 3-(trifluoromethylsulfonyloxy)pyridine-2-carboxylate (1.2 g) obtained in the previous step was treated in the same manner as in Example 5 to give the title compound (728 mg, yield 69%).

¹H-NMR (300MHz, CDCl₃): 8.73-8.66(1H, m), 7.77-7.68(1H, m), 7.49(1H, dd, J=7.8, 4.5Hz), 7.46-7.37(2H, m), 7.32-7.23(2H, m), 3.80(3H, s)

Step 4: Production of [3-(4-chlorophenyl)pyridin-2-yl]methanol

Methyl 3-(4-chlorophenyl)pyridine-2-carboxylate (720 mg)

obtained in the previous step was dissolved in tetrahydrofuran

(10 ml) and the solution was ice-cooled. Lithium aluminum hydride

(160 mg) was added to the solution and the mixture was stirred

for 1 hr. To the reaction mixture were added successively water

20 (1.6 ml), 15% sodium hydroxide (1.6 ml) and water (4.8 ml). The

insoluble materials were filtered off and the filtrate was

insoluble materials were filtered off and the filtrate was concentrated under reduced pressure. The residue was purified by silica gel flash chromatography (developing solvent, n-hexane:ethyl acetate = 1:1) to give the title compound (208 mg, yield 32%).

¹H-NMR (300MHz, CDCl₃): 8.60(1H, dd, J=4.8, 1.5Hz), 7.60-7.55(1H, m), 7.40-7.48(2H, m), 7.29-7.36(1H, m), 7.27-7.20(3H, m), 4.63(2H, s)

Step 5: Production of ethyl 2-{4-[3-(4-chlorophenyl)pyridin-2ylmethoxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylate
 [3-(4-Chlorophenyl)pyridin-2-yl]methanol (200 mg) obtained
in the previous step was dissolved in chloroform (3 ml), and
thionyl chloride (0.13 ml) and pyridine (catalytic amount) were
added. The mixture was stirred for 1 hr at room temperature and
concentrated under reduced pressure. The residue was dissolved in
dimethylformamide (3 ml), and ethyl 1-cyclohexyl-2-(4hydroxyphenyl)benzimidazole-5-carboxylate (232 mg) obtained in
the same manner as in Example 3 and potassium carbonate (250 mg)

were added. The mixture was stirred for 3 hr with heating at 80°C. The reaction mixture was then allowed to cool. Water was added and the mixture was extracted with ethyl acetate. The organic layer was washed with water and saturated brine, dried over anhydrous magnesium sulfate and concentrated under reduced pressure. The residue was purified by silica gel flash chromatography (developing solvent, n-hexane:ethyl acetate = 1:2) to give the title compound (246 mg, yield 68%).

1H-NMR (300MHz, CDCl₃): 8.71(1H, dd, J=4.7, 1.4Hz), 8.49(1H, d, J=2.1Hz), 7.96(1H, d, J=10.2Hz), 7.71-7.62(2H, m), 7.53(2H, d, J=8.7Hz), 7.45-7.34(5H, m), 7.04(2H, d, J=8.7Hz), 5.14(2H, s),

J=8.7Hz), 7.45-7.34(5H, m), 7.04(2H, d, J=8.7Hz), 5.14(2H, s), 4.48-4.29(3H, m), 2.38-2.19(2H, m), 2.02-1.22(11H, m)

Example 244

Production of methyl 2-[4-(2-bromo-5-tert-butoxycarbonyl-15 benzyloxy)phenyl]-1-cyclohexylbenzimidazole-5-carboxylate Step 1: Production of tert-butyl 4-bromo-3-methylbenzoate

4-Bromo-3-methylbenzoic acid (25 g) was suspended in dichloromethane (200 ml), and oxalyl chloride (12 ml) and dimethylformamide (catalytic amount) were added. The mixture was stirred for 2 hr at room temperature and the solvent was evaporated under reduced pressure. The residue was dissolved in tetrahydrofuran (200 ml) and the solution was ice-cooled. To the solution was added dropwise a solution of potassium tert-butoxide dissolved in tetrahydrofuran (150 ml) and the mixture was stirred for 30 min. Water was added to the reaction mixture and the

- mixture was extracted with ethyl acetate. The organic layer was washed with water and saturated brine, and dried over anhydrous magnesium sulfate. The solvent was evaporated under reduced pressure to give the title compound (27 g, yield 85%).
- 30 1 H-NMR (300MHz, CDCl₃): 7.83(1H, d, J=2.2Hz), 7.67-7.53(2H, m), 2.43(3H, s), 1.58(9H, s)
 - **Step 2:** Production of methyl 2-[4-(2-bromo-5-tert-butoxycarbonylbenzyloxy)phenyl]-1-cyclohexylbenzimidazole-5-carboxylate
- tert-Butyl 4-bromo-3-methylbenzoate (7.0 g) obtained in the previous step and methyl 1-cyclohexyl-2-(4-hydroxyphenyl)-benzimidazole-5-carboxylate (6.3 g) obtained in the same manner

as in Example 3 were treated in the same manner as in Example 4 to give the title compound (8.8 g, yield 77%).

¹H-NMR (300MHz, CDCl₃): 8.49(1H, d, J=1.5Hz), 8.21(1H, d, J=2.1Hz), 7.97(1H, d, J=10.2Hz), 7.82(1H, d, J=10.2Hz), 7.71-7.58(4H, m),

5 7.16(2H, d, J=8.7Hz), 5.23(2H, s), 4.38(1H, m), 3.95(3H, s), 2.40-2.23(2H, m), 2.04-1.90(4H, m), 1.84-1.73(1H, m), 1.59(9H, s), 1.44-1.27(3H, m)

Example 245

Production of methyl 2-{4-[5-tert-butoxycarbonyl-2-(410 chlorophenyl)benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5carboxylate

Methyl 2-[4-(2-bromo-5-tert-butoxycarbonylbenzyloxy)phenyl]1-cyclohexylbenzimidazole-5-carboxylate (4.5 g) obtained in
Example 244 was treated in the same manner as in Example 5 to

15 give the title compound (3.6 g, yield 76%).

14-NMR (300MHz, CDCl₃): 8.48(1H, s), 8.27(1H, d, J=1.8Hz), 8.04(1H, dd, J=7.9, 1.5Hz), 7.96(1H, dd, J=7.0, 1.5Hz), 7.65(1H, d, J=8.6Hz), 7.55(2H, d, J=8.6Hz), 7.43-7.32(5H, m), 7.01(2H, d, J=8.6Hz), 4.99(2H, s), 4.43-4.29(1H, m), 3.95(3H, s), 2.41
20 2.21(2H, m), 2.02-1.89(4H, m), 1.82-1.73(1H, m), 1.62(9H, s), 1.46-1.28(3H, m)

Example 246

Production of methyl 2-{4-[5-carboxy-2-(4-chlorophenyl)-benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylate hydrochloride

Methyl 2-{4-[5-tert-butoxycarbonyl-2-(4-chlorophenyl)-benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylate (3.5 g) obtained in Example 245 was dissolved in dichloromethane (35 ml), and trifluoroacetic acid (35 ml) was added. The mixture was stirred for 1 hr at room temperature and the reaction mixture was concentrated under reduced pressure. The residue was dissolved in ethyl acetate, and 4N hydrochloric acid-ethyl acetate was added. The precipitated crystals were collected by filtration and dried under reduced pressure to give the title compound (3.3 g, yield 97%).

 1 H-NMR (300MHz, DMSO-d₆): 8.33(1H, d, J=1.5Hz), 8.29(1H, s), 8.24(1H, d, J=1.8Hz), 8.09-8.00(2H, m), 7.74(2H, d, J=8.6Hz),

7.61-7.44(5H, m), 7.24(2H, d, J=8.6Hz), 5.19(2H, s), 4.36(1H, m), 3.93(3H, s), 2.37-1.21(10H, m)

Example 247

Production of methyl 2-{4-[2-(4-chlorophenyl)-5-methylcarbamoyl-5 benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylate

Methyl $2-\frac{4-[5-carboxy-2-(4-chlorophenyl)benzyloxy]phenyl}{-}$ 1-cyclohexylbenzimidazole-5-carboxylate hydrochloride (400 mg) obtained in Example 246 was suspended in dichloromethane (5 ml), and oxalyl chloride (0.08 ml) and dimethylformamide (catalytic 10 amount) were added. The mixture was stirred for 2 hr at room temperature. The reaction mixture was concentrated under reduced pressure and the residue was dissolved in dichloromethane (5 ml). The resulting solution was added dropwise to a mixed solution of 40% aqueous methylamine solution (5 ml) and tetrahydrofuran (5 15 ml) under ice-cooling. The reaction mixture was stirred for 1 hr and concentrated under reduced pressure. Water was added to the residue and the mixture was extracted with ethyl acetate. The organic layer was washed with water, saturated aqueous sodium hydrogencarbonate and saturated brine, and dried over anhydrous 20 magnesium sulfate. The solvent was evaporated under reduced pressure and the residue was crystallized from ethyl acetate and diisopropyl ether. The crystals were collected by filtration and dried under reduced pressure to give the title compound (335 mg, yield 86%).

¹H-NMR (300MHz, CDCl₃): 8.47(1H, s), 8.06(1H, d, J=1.8Hz), 7.96(1H, dd, J=8.6, 1.5Hz), 7.82(1H, dd, J=8.2, 2.2Hz), 7.64(1H, d, J=8.6Hz), 7.54(2H, d, J=9.0Hz), 7.44-7.31(5H, m), 6.99(2H, d, J=9.0Hz), 6.35-6.26(1H, m), 5.00(2H, s), 4.35(1H, m), 3.95(3H, s), 3.05(3H, d, J=4.8Hz), 2.40-1.24(10H, m)

30 Example 248

Production of 2-{4-[2-(4-chlorophenyl)-5-methylcarbamoylbenzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylate hydrochloride

Methyl 2-{4-[2-(4-chlorophenyl)-5-methylcarbamoylbenzyloxy]35 phenyl}-1-cyclohexylbenzimidazole-5-carboxylate (150 mg) obtained in Example 247 and tetrahydrofuran (2 ml) were treated in the same manner as in Example 2 to give the title compound (141 mg, yield 90%).

APCI-Ms: 594 (MH+)

¹H-NMR (300MHz, DMSO-d₆): 8.65-8.58(1H, m), 8.27(1H, d, J=1.5Hz), 8.21(1H, d, J=8.2Hz), 8.15(1H, d, J=1.5Hz), 8.05-7.90(2H, m), 7.70(2H, d, J=8.6Hz), 7.56-7.43(5H, m), 7.21(2H, d, J=8.6Hz), 5.14(2H, s), 4.34(1H, m), 2.81(3H, d, J=4.5Hz), 2.39-1.19(10H, m) Example 336

Production of methyl 2-[4-(2-bromo-5-nitrobenzyloxy)-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylate

Commercially available 2-bromo-5-nitrotoluene was 10 dissolved in carbon tetrachloride (30 ml), and N-bromosuccinimide (2.9 g) and N, N'-azobisisobutyronitrile (228 mg) were added, which was followed by refluxing under heating overnight. The reaction mixture was allowed to cool, water was added and the mixture was extracted with chloroform. The organic layer was 15 dried over magnesium sulfate and concentrated under reduced pressure. The residue was dissolved in dimethylformamide (30 ml) and methyl 2-(2-fluoro-4-hydroxyphenyl)-1cyclohexylbenzimidazole-5-carboxylate (3.8 g) obtained in the same manner as in Example 3 and potassium carbonate (3.8 g) were 20 added, which was followed by stirring at 80°C for 1 hr. The reaction mixture was allowed to cool, water was added and the mixture was extracted with ethyl acetate. The organic layer was washed with water and saturated brine, dried over anhydrous magnesium sulfate and concentrated under reduced pressure. The 25 residue was purified by silica gel flash chromatography (nhexane: ethyl acetate = 1:1) to give the title compound (3.7 g, vield 61%).

¹H-NMR (300MHz, CDCl₃): 8.55-8.45(2H, m), 8.15-8.05(1H, m), 7.99(1H, dd, J=8.6Hz, 1.5Hz), 7.70-7.55(2H, m), 7.05-6.85(2H, m), 30 5.24(2H, s), 4.06(1H, m), 3.95(3H, s), 2.35-2.15(2H, m), 2.05-1.85(4H, m), 1.80-1.70(1H, m), 1.45-1.20(3H, m)

Example 337

Production of methyl 2-[4-{2-(4-chlorophenyl)-5-nitrobenzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylate

Methyl 2-[4-(2-bromo-5-nitrobenzyloxy)-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylate (2.0 g) obtained in Example 336, 4-chlorophenylboronic acid (590 mg) and tetrakis(triphenylphosphine)palladium (396 mg) were suspended in

dimethoxyethane (40 ml), and saturated aqueous sodium hydrogencarbonate solution (20 ml) was added, which was followed by refluxing under heating for 1 hr. The reaction mixture was allowed to cool, water was added and the mixture was extracted with chloroform. The organic layer was dried over anhydrous magnesium sulfate and concentrated under reduced pressure. The residue was purified by silica gel flash chromatography (n-hexane:ethyl acatate = 2:1) to give the title compound (1.9 g, yield 90%).

15 Production of methyl 2-[4-{5-amino-2-(4-chlorophenyl)benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylate

Methyl 2-[4-{2-(4-chlorophenyl)-5-nitrobenzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylate (1.9 g) obtained in Example 337 was suspended in ethanol (40 ml), and 20 tin(II) chloride dihydrate (3.5 g) was added, which was followed by refluxing under heating for 30 min. The reaction mixture was concentrated under reduced pressure, 4N sodium hydroxide was added and the mixture was extracted with chloroform. The organic layer was washed with 2N sodium hydroxide and water, dried over 25 anhydrous magnesium sulfate and concentrated under reduced pressure. Diisopropyl ether was added to the residue, and the precipitated crystals were collected by filtration to give the title compound (1.5 g, yield 82%).

¹H-NMR (300MHz, CDCl₃): 8.49(1H, d, J=1.2Hz), 7.98(1H, dd, J=9.0, 30 1.5Hz), 7.66(1H, d, J=8.7Hz), 7.49(1H, t, J=8.4Hz), 7.40-7.20(3H, m), 7.13(1H, d, J=8.1Hz), 6.92(1H, d, J=2.7Hz), 6.85-6.65(4H, m), 4.92(2H, s), 4.03(1H, m), 3.95(3H, s), 3.82(2H, brs), 2.30-2.10(2H, m), 2.05-1.80(4H, m), 1.80-1.70(1H, m), 1.40-1.10(3H, m) Example 339

35 Production of methyl 2-[4-{2-(4-chlorophenyl)-5-(2-oxopyrrolidin-1-yl)benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylate

Methyl 2-[4-\{5-amino-2-(4-chlorophenyl)benzyloxy\}-2fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylate (500 mg) obtained in Example 338 and triethylamine (0.14 ml) were dissolved in chloroform (5 ml), and commercially available 5 chlorobutyryl chloride (0.1 ml) was added under ice-cooling, which was followed by stirring at room temperature for 3 hr. Water was added to the reaction mixture and the mixture was extracted with ethyl acetate. The organic layer was washed with water and saturated brine, dried over anhydrous magnesium sulfate 10 and concentrated under reduced pressure. The residue was dissolved in dimethylformamide (6 ml) and potassium carbonate (244 mg) was added, which was followed by stirring at 80°C for 1 hr. The reaction mixture was allowed to cool, water was added and the precipitated crystals were collected by filtration to give 15 the title compound (502 mg, yield 89%). 1 H-NMR (300MHz, CDCl₃): 4.89(1H, d, J=1.5Hz), 7.98(1H, dd, J=8.6Hz, 1.6Hz), 7.72(1H, d, J=2.2Hz), 7.75-7.65(2H, m), 7.49(1H, t, J=8.3Hz), 7.45-7.20(5H, m), 6.85-7.65(2H, m), 4.99(2H, s), 4.10-3.85(6H, m), 2.66(2H, t, J=7.8Hz), 2.30-2.15(4H, m), 2.00-1.85(4H, 20 m), 1.80-1.70(1H, m), 1.45-1.20(3H, m)

Example 340

Production of 2-[4-{2-(4-chlorophenyl)-5-(2-oxopyrrolidin-1-yl)benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride

Methyl 2-[4-{2-(4-chlorophenyl)-5-(2-oxopyrrolidin-1-yl)benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylate (200 mg) obtained in Example 339 was treated in the same manner as in Example 2 to give the title compound (182 mg, yield 87%).

30 Ms: 638 (M+1)

¹H-NMR (300MHz, CDCl₃): 8.28(1H, d, J=1.3Hz), 8.10(1H, d, J=8.7Hz), 8.05-7.90(2H, m), 7.77(1H, dd, J=8.4Hz, 2.2Hz), 7.61(1H, t, J=8.5Hz), 7.55-7.35(5H, m), 7.00-7.20(2H, m), 5.09(2H, s), 4.06(1H, m), 3.90(2H, t, J=6.9Hz), 2.60-2.45(2H, m), 2.30-2.00(4H, 35 m), 1.95-1.75(4H, m), 1.70-1.55(1H, m), 1.45-1.15(3H, m)

Example 340-2

Step 1: Production of 4'-chloro-4-nitro-biphenyl-2-carbaldehyde

To a solution of 2-chloro-5-nitrobenzaldehyde (100 g) in 1,2-dimethoxyethane (1000 ml) were added 4-chlorophenylboronic acid (93 g), bistriphenylphosphine palladium(II) dichloride (380 mg), sodium hydrogencarbonate (68 g) and water (500 ml), and the 5 mixture was refluxed for 1 hr. The reaction mixture was cooled to 50°C, ethyl acetate (1000 ml) was added thereto and the mixture was stirred. The aqueous layer was separated and the organic layer was washed with water (500 ml), 1N aqueous sodium hydroxide solution (500 ml), water (500 ml), 28% aqueous ammonia (500 ml), water (500 ml), 2N hydrochloric acid (500 ml) and saturated brine (500 ml), dried over anhydrous magnesium sulfate and concentrated under reduced pressure. The residue was suspended in diisopropyl ether (500 ml), filtrated and vacuum dried to give the title compound (120 g, yield 85%).

15 ¹H-NMR (300MHz, DMSO-d₆): 9.92(1H, s), 8.61 (1H, d, J=2.5Hz), 8.53(1H, dd, J=2.6Hz, 8.5Hz), 7.82(1H, d, J=8.5Hz), 7.64(2H, d, J=8.7Hz), 7.59(2H, d, J=8.7Hz)

Step 2: Production of (4'-chloro-4-nitro-biphenyl-2-yl)methanol
A solution of 4'-chloro-4-nitro-biphenyl-2-carbaldehyde (120
g) obtained in the previous step in tetrahydrofuran (900 ml) was added dropwise to a suspension of sodium borohydride (47 g) in 2-propanol (600 ml), over 70 min under water-cooling. The reaction mixture was stirred at room temperature for 1 hr, and 2N hydrochloric acid (185 ml) was dropwise added thereto over 40 min under water-cooling. The mixture was stirred at room temperature for 30 min and concentrated under reduced pressure. The residue was suspended in 2-propanol (300 ml), and water (1000 ml) was added with stirring. After stirring the mixture for 30 min, the crystals were collected by filtration and vacuum dried to give the title compound (116 g, yield 96%).

1H-NMR (300MHz, DMSO-d₆): 8.43(1H, d, J=2.5Hz), 8.19(1H, dd,

 1 H-NMR (300MHz, DMSO-d₆): 8.43(1H, d, J=2.5Hz), 8.19(1H, dd, J=2.6Hz, 8.4Hz), 7.57(2H, d, J=8.5Hz), 7.52(1H, d, J=8.4Hz), 7.47(2H, d, J=8.6Hz), 5.59(1H, brs), 4.48(2H, s)

Step 3: Production of (4-amino-4'-chloro-biphenyl-2-yl)methanol

To a suspension of (4'-chloro-4-nitro-biphenyl-2-yl)methanol

(1.0 g) obtained in the previous step and sodium hydrosulfite

(2.0 g) in N,N-dimethylformamide (4 ml) and methanol (1 ml) was

added water (0.3 ml, 50 µl each time in 6 portions) every 20 min

at 100°C. Water (5 ml) was added threto at room temperature. Conc. hydrochloric acid (2.5 ml) was added threto at room temperature. The mixture was stirred at 55°C for 2.5 hr, and a solution of sodium hydroxide (1.2 g) in water (3 ml) was added under ice-cooling. Water (5 ml) was added and the mixture was stirred at room temperature for 1 hr. The precipitate was filtrated and washed with water (3 ml). The crystals were vacuum dried to give the title compound (700 mg, yield 79%).

1H-NMR (400MHz, DMSO-d₆): 7.39(2H, d, J=8.5Hz), 7.35(2H, d, J=8.5Hz), 6.90(1H, d, J=8.4Hz), 6.82(1H, s), 6.56(1H, d, J=8.4Hz), 5.20(2H, brs), 5.04(1H, t, J=5.4Hz), 4.29(2H, d, J=5.4Hz)

Step 4: Production of 4-chloro-N-(4'-chloro-2-hydroxymethyl-biphenyl-4-yl) butyramide

To a solution of (4-amino-4'-chloro-biphenyl-2-yl)-methanol (1.0 g) obtained in the previous step in tetrahydrofuran (10 ml) were added sodium acetate (390 mg) and acetic acid (0.27 ml) at room temperature.

4-Chlorobutyryl chloride (0.48 ml) was gradually added dropwise under ice-cooling. After stirring the mixture at room temperature for 30 min, water (20 ml) and ethyl acetate (20 ml) were added to the reaction mixture and the organic layer was separated. The organic layer was washed with saturated aqueous sodium hydrogencarbonate (20 ml) and saturated brine (20 ml). The organic layer was dried over sodium sulfate, filtrated and the solvent was evaporated to give the title compound (1.44 g, yield 99%).

¹H-NMR (300MHz, CDCl₃): 7.68(1H, s), 7.55(1H, d, J=8.4Hz), 7.39(2H, d, J=8.5Hz), 7.28(2H, d, J=8.5Hz), 7.22(1H, d, J=8.3Hz), 4.58(2H, s), 3.69(2H, t, J=6.1Hz), 2.60(2H, t, J=7.0Hz), 2.22(2H, m)

30 **Step 5:** Production of 1-(4'-chloro-2-hydroxymethyl-biphenyl-4-yl)-2-pyrrolidinone

To a solution of 4-chloro-N-(4'-chloro-2-hydroxymethyl-biphenyl-4-yl)butyramide (1.44 g) obtained in the previous step in N,N-dimethylformamide (15 ml) was added potassium carbonate (710 mg) at room temperature. After stirring the mixture at 100°C for 90 min, 1N hydrochloric acid (5 ml) and water (20 ml) were added at room temperature and the precipitated crystals were collected by filtration and washed with water (5 ml). The

crystals were vacuum dried to give the title compound (970 mg, yield 76%).

¹H-NMR (300MHz, CDCl₃): 7.76(1H, d, J=2.3Hz), 7.62(1H, dd, J=2.4Hz, 8.3Hz), 7.38(2H, d, J=8.5Hz), 7.29(2H, d, J=8.5Hz), 7.25(1H, d, J=8.3Hz), 4.61(2H, s), 3.91(2H, t, J=7.0Hz), 2.62(2H, t, J=7.8Hz), 2.18(2H, m)

Step 6: Production of 1-(4'-chloro-2-chloromethyl-biphenyl-4-yl)-2-pyrrolidinone

To a mixed solution of 1-(4'-chloro-2-hydroxymethyl
biphenyl-4-yl)-2-pyrrolidinone (900 mg) obtained in the previous step in N,N-dimethylformamide (2 ml) and toluene (7 ml) was dropwise added thionyl chloride (0.26 ml) under ice-cooling.

After stirring the mixture at room temperature for 3 hr, the reaction mixture was diluted with ethyl acetate (20 ml) and washed with water (20 ml), saturated aqueous sodium hydrogencarbonate (20 ml) and saturated brine (20 ml). The organic layer was dried over sodium sulfate, filtrated and the solvent was evaporated under reduced pressure to give the title compound (954 mg, yield 99%).

20 ¹H-NMR (300MHz, CDCl₃): 7.77(1H, d, J=2.3Hz), 7.69(1H, dd, J=2.4Hz, 8.5Hz), 7.42(2H, d, J=8.6Hz), 7.34(2H, d, J=8.6Hz), 7.26(1H, d, J=8.4Hz), 4.50(2H, s), 3.92(2H, t, J=7.0Hz), 2.65(2H, t, J=7.8Hz), 2.20(2H, m)

Step 7: Production of methyl 2-[4-{2-(4-chlorophenyl)-5-(2oxopyrrolidin-1-yl)benzyloxy}-2-fluorophenyl]-1cyclohexylbenzimidazole-5-carboxylate

To a suspension of methyl 1-cyclohexyl-2-(2-fluoro-4-hydroxyphenyl)benzimidazole-5-carboxylate (915 mg) obtained in Example 18 in N,N-dimethylformamide (6 ml) was added 1-(4'-30 chloro-2-chloromethyl-biphenyl-4-yl)-2-pyrrolidinone (954 mg) obtained in the previous step and potassium carbonate (415 mg) at room temperature. After stirring the mixture at 100°C for 1 hr, 1N hydrochloric acid (3 ml) and water (8 ml) were added at room temperature and the precipitated crystals were collected by filtration and washed with water (5 ml). The crystals were vacuum dried to give the title compound (1.6 g, yield 100%).

1H-NMR (300MHz, CDCl₃): 8.49(1H, d, J=1.5Hz), 7.98(1H, dd, J=1.6Hz, 8.6Hz), 7.90(1H, d, J=2.2Hz), 7.72-7.65(2H, m), 7.49(1H, t,

J=8.3Hz), 7.40(2H, d, J=8.5Hz), 7.34(1H, d, J=8.7Hz), 7.31(2H, d, J=8.6Hz), 6.80 (1H, d, J=8.6Hz), 6.71(1H, d, J=11.6Hz), 4.99(2H, s), 4.04(1H, m), 3.95(3H, s), 3.93(2H, t, J=7.1Hz), 2.66(2H, t, J=7.8Hz), 2.30-2.15(4H, m), 2.00-1.85(4H, m), 1.80-1.70(1H, m), 5 1.45-1.20(3H, m)

Step 8: Production of 2-{4-{2-(4-chlorophenyl)-5-(2-oxopyrrolidin-1-yl)benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid

Methyl 2-[4-(2-(4-chlorophenyl)-5-(2-oxopyrrolidin-1-yl)benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylate (2.0 g) obtained in the previous step was suspended in methanol (4.0 ml) and tetrahydrofuran (8.0 ml), and 2N aqueous sodium hydroxide solution (2.3 ml) was added. The mixture was heated under reflux for 3 hr. The reaction mixture was allowed to cool and tetrahydrofuran (1.0 ml) and water (5.0 ml) were added. 2N Hydrochloric acid (2.3 ml) was gradually added at room temperature. After stirring the mixture at room temperature for 2 hr, the precipitated crystals were collected by filtration and washed successively with methanol-water (1:1) mixed solution (6.0 ml), water (6.0 ml) and methanol-water (1:1) mixed solution (6.0 ml), and vacuum dried to give the title compound (1.84 g, yield 94%).

¹H-NMR (300MHz, DMSO-d₆): 12.75(1H, brs), 8.26(1H, s), 7.99(1H, s), 7.96(1H, d, J=9.0Hz), 7.89(1H, d, J=9.0Hz), 7.78(1H, dd, J=2.1Hz, 8.4Hz), 7.54(1H, t, J=9.0Hz), 7.49(2H, d, J=8.7Hz), 7.45(2H, d, J=8.4Hz), 7.38(1H, d, J=8.4Hz), 7.08(1H, dd, J=2.1Hz, 12.0Hz), 6.96(1H, dd, J=2.1Hz, 8.7Hz), 5.09(2H, s), 3.99(1H, m), 3.91(2H, t, J=6.6Hz), 2.54(2H, t, J=7.8Hz), 2.30-2.00(4H, m), 1.95-1.50(5H, m), 1.45-1.20(3H, m)

30 **Step 9:** Production of 2-[4-{2-(4-chlorophenyl)-5-(2-oxopyrrolidine-1-yl)benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride

To 4N hydrochloric acid (50 ml) were successively added 2-[4-{2-(4-chlorophenyl)-5-(2-oxopyrrolidin-1-yl)benzyloxy}-2-

fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid (10.0 g) obtained in the previous step and acetone-methyl ethyl ketone (3:2) mixed solution (20 ml). The mixture was stirfed at 60°C for 3 hr and at room temperature for 1 hr. The crystals were

collected by filtration, washed twice with acetone (10 ml) and vacuum dried to give the title compound (9.62 g, yield 91%). melting point: $243-246^{\circ}$ C

Ms: 638(M+1)

5 ¹H-NMR (300MHz, DMSO-d₆): 8.33(1H, d, J=1.1Hz), 8.21(1H, d, J=8.8Hz), 8.02(1H, d, J=8.8Hz), 8.00(1H, d, J=2.2Hz), 7.77(1H, dd, J=2.2Hz, 8.4Hz), 7.68(1H, t, J=8.4Hz), 7.50(2H, d, J=8.4Hz), 7.45(2H, d, J=8.4Hz), 7.39(1H, d, J=8.4Hz), 7.20(1H, dd, J=2.2Hz, 12.1Hz), 7.06(1H, dd, J=2.2Hz, 8.8Hz), 5.11(2H, s), 4.13(1H, m), 3.91(2H, t, J=7.0Hz), 2.54(2H, t, J=8.1Hz), 2.40-2.05(4H, m).

10 3.91(2H, t, J=7.0Hz), 2.54(2H, t, J=8.1Hz), 2.40-2.05(4H, m), 2.00-1.75(4H, m), 1.70-1.55(1H, m), 1.50-1.20(3H, m)

In the same manner as in Examples 1-30, 241-248 and 336-340 and optionally using other conventional methods, where necessary, the compounds of Examples 31-240, 249-335, 341-471, 701-703 and 1001-1559 were obtained. The chemical structures and properties are shown in Table 1 to 177, 185 to 212, 219 to 221 and 225 to 269.

Example 501

Production of methyl $2-\frac{4}{12}-\frac{4-(2-(4-chlorophenyl))-5-}{12-(4-chlorophenyl)}$

20 methoxybenzyloxy]phenyl \(\frac{1}{-1} - \text{cyclohexyl-1H-indole-5-carboxylate} \)
Step 1: Production of methyl 3-bromo-4-cyclohexylaminobenzoate

3-Bromo-4-fluorobenzoic acid (2.0 g) was dissolved in

methanol (20 ml) and concentrated sulfuric acid (2 ml) was added. The mixture was refluxed for 3 hr. The reaction mixture was poured into ice-cold water and extracted with ethyl acetate (50 ml). The organic layer was washed with water (30 ml) and saturated brine (30 ml), and dried over sodium sulfate. After filtration, the solvent was evaporated under reduced pressure. The residue was dissolved in dimethyl sulfoxide (20 ml) and cyclohexylamine (10.3 ml) was added. The mixture was stirred

overnight at 120°C. The reaction mixture was poured into 10% aqueous citric acid solution (100 ml) and extracted with ethyl acetate (100 ml). The organic layer was washed with water (50 ml) and saturated brine (50 ml), and dried over sodium sulfate. After

filtration, the solvent was evaporated under reduced pressure and the residue was purified by silica gel flash chromatography (developing solvent, n-hexane:ethyl acetate = 10:1) to give the title compound (2.6 g, yield 92%).

¹H-NMR (300MHz, CDCl₃): 8.10(1H, d, J=1.9Hz), 7.83(1H, dd, J=1.9Hz, 8.6Hz), 6.59(1H, d, J=8.7Hz), 4.73(1H, brd, J=7.3Hz), 3.85(3H, s), 3.38(1H, m), 2.10-2.00(2H, m), 1.90-1.20(8H, m)

Step 2: Production of 4'-chloro-2-(4-iodophenoxymethyl)-45 methoxybiphenyl

4-Iodophenol (5.0 g) was dissolved in acetone (50 ml), and potassium carbonate (4.7 g) and 4'-chloro-2-chloromethyl-4-methoxybiphenyl (6.0 g) were added. The mixture was refluxed for 10 hr. The reaction mixture was concentrated and 4N aqueous sodium hydroxide solution (50 ml) was added. The precipitated crystals were collected by filtration, washed with water, and dried under reduced pressure to give the title compound (10.0 g, yield 98%).

¹H-NMR (300MHz, CDCl₃): 7.52(2H, d, J=8.9Hz), 7.35(2H, d, J=8.5Hz), 7.27-7.20(3H, m), 7.12(1H, s), 6.95(1H, d, J=8.5Hz), 6.62(2H, d, J=8.9Hz), 4.84(2H, s), 3.85(3H, s)

Step 3: Production of [4-(4'-chloro-4-methoxybiphenyl-2-ylmethoxy) phenylethynyl] trimethylsilane

4'-Chloro-2-(4-iodophenoxymethyl)-4-methoxybiphenyl (7.0 g) 20 obtained in the previous step was dissolved in acetonitrile (50 ml), and trimethylsilylacetylene (2.3 g), tetrakis-(triphenylphosphine)palladium complex (1.8 g), copper(I) iodide (0.6 g) and triethylamine (50 ml) were added. The mixture was stirred overnight at room temperature and concentrated. Water (30 25 ml) was added and the mixture was extracted with ethyl acetate (50 ml). The organic layer was washed with water (30 ml) and saturated brine (30 ml) and dried over sodium sulfate. After filtration, the solvent was evaporated under reduced pressure and the residue was purified by silica gel flash chromatography 30 (developing solvent, n-hexane:ethyl acetate = 10:1) to give the title compound (5.1 g, yield 79%). 1 H-NMR (300MHz, CDCl₃): 7.37(2H, d, J=8.9Hz), 7.34(2H, d, J=8.2Hz), 7.28-7.21(3H, m), 7.13(1H, s), 6.94(1H, d, J=8.2Hz), 6.75(2H, d, J=8.2Hz)J=8.9Hz), 4.87(2H, s), 3.85(3H, s), 0.23(9H, s)

35 **Step 4:** Production of methyl 3-[4-(4'-chloro-4-methoxybiphenyl-2-ylmethoxy) phenylethynyl]-4-cyclohexylaminobenzoate

[4-(4'-Chloro-4-methoxybiphenyl-2-ylmethoxy)phenylethynyl]-trimethylsilane (5.1 g) obtained in the previous step was

dissolved in methanol (50 ml) and chloroform (50 ml), and potassium carbonate (2.5 g) was added. The mixture was stirred for 3 hr at room temperature and concentrated. Water (30 ml) was added and the mixture was extracted with ethyl acetate (50 ml).

- 5 The organic layer was washed with water (30 ml) and saturated brine (30 ml) and dried over sodium sulfate. After filtration, the solvent was evaporated under reduced pressure to give white crystals (3.8 g). The white crystals (2.3 g) were dissolved in acetonitrile (10 ml), and methyl 3-bromo-4-cyclohexylamino-
- benzoate (1.0 g) obtained in Step 1, tetrakis(triphenylphosphine)palladium complex (0.4 g), copper(I) iodide (0.1 g) and
 triethylamine (10 ml) were added. The mixture was stirred
 overnight at 100°C and concentrated under reduced pressure. Water
 (30 ml) was added and the mixture was extracted with ethyl
- and saturated brine (30 ml), and dried over sodium sulfate. After filtration, the solvent was evaporated under reduced pressure and the residue was purified by silica gel flash chromatography (developing solvent, n-hexane:ethyl acetate = 8:1) to give the
- 20 title compound (0.9 g, yield 49%).

 1H-NMR (300MHz, CDCl₃): 8.03(1H, s), 7.84(1H, d, J=8.7Hz), 7.427.22(7H, m), 7.15(1H, s), 6.95(1H, d, J=8.2Hz), 6.85(2H, d,
 J=8.8Hz), 6.59(1H, d, J=8.8Hz), 5.07(1H, brs), 4.91(2H, s),
 3.86(3H, s), 3.85(3H, s), 3.42(1H, m), 2.15-2.00(2H, m), 1.8025 1.20(8H, m)

(developing solvent, n-hexane:ethyl acetate = 8:1) to give the title compound (0.27 g, yield 55%).

 1 H-NMR (300MHz, CDCl₃): 8.34(1H, s), 7.85(1H, d, J=8.8Hz), 7.62(1H, d, J=8.8Hz), 7.40-7.18(8H, m), 7.00-6.94(3H, m), 6.48(1H, s),

5 4.95(2H, m), 4.18(1H, m), 3.93(3H, s), 3.88(3H, s), 2.45-2.25(2H, m), 1.95-1.20(8H, m)

Example 502

Production of 2-\(\frac{4-[2-(4-chlorophenyl)-5-methoxybenzyloxy]phenyl\}-1-cyclohexyl-1H-indole-5-carboxylic acid

Methyl 2-{4-[2-(4-chlorophenyl)-5-methoxybenzyloxy]phenyl}1-cyclohexyl-1H-indole-5-carboxylate (0.27 g) obtained in Example
501 was treated in the same manner as in Example 2 to give the
title compound (0.19 g, yield 71%).

APCI-Ms: 566 (MH+)

In the same manner as in Examples 501 and 502, and 20 optionally using other conventional methods where necessary, the compound of Example 503 was obtained. The chemical structure and properties are shown in Table 207.

Example 601

Production of ethyl 2-(4-benzyloxyphenyl)-3-cyclohexylimidazo-25 [1,2-a]pyridine-7-carboxylate

Step 1: Production of 4-benzyloxy-N-methoxy-N-methylbenzamide
4-Benzyloxybenzoic acid (5.0 g) and N,O-dimethylhydroxylamine hydrochloride (2.5 g) were suspended in
dimethylformamide (50 ml), and 1-(3-dimethylaminopropyl)-330 ethylcarbodiimide hydrochloride (5.0 g), 1-hydroxybenzotriazole
(3.5 g) and triethylamine (3.6 ml) were added. The mixture was
stirred overnight at room temperature. Water was added to the
reaction mixture and the mixture was extracted with ethyl acetate.
The organic layer was washed successively with water, saturated
35 aqueous sodium hydrogencarbonate, water and saturated brine, and
dried over anhydrous magnesium sulfate. The solvent was
evaporated under reduced pressure to give the title compound (5.6
g, yield 94%).

 1 H-NMR (300MHz, CDCl₃): 7.22, 2H, d, J=8.8Hz), 7.28-7.46(5H, m), 6.97(2H, d, J=8.8Hz), 5.10(2H, s), 3.56(3H, s), 3.35(3H, s)

Step 2: Production of 1-(4-benzyloxyphenyl)-2-cyclohexylethanone
Magnesium (470 mg) was suspended in tetrahydrofuran (2 ml)

and cyclohexylmethyl bromide (3.4 g) was added dropwise at room
temperature. After the addition, the reaction mixture was stirred
for 30 min at 60°C. The reaction mixture was allowed to cool and
diluted with tetrahydrofuran (5 ml). Separately, 4-benzyloxy-Nmethoxy-N-methylbenzamide (3.4 g) obtained in the previous step
was dissolved in tetrahydrofuran (10 ml) and the solution was
added dropwise to the reaction mixture at room temperature. The
mixture was stirred for 2 hr and saturated aqueous ammonium
chloride solution was added to the reaction mixture. The mixture
was extracted with diethyl ether. The organic layer was washed
with saturated brine and dried over anhydrous magnesium sulfate,

with saturated brine and dried over anhydrous magnesium sulfate, and the solvent was evaporated under reduced pressure. The residue was purified by silica gel flash chromatography (developing solvent, n-hexane:ethyl acetate = 9:1) to give the title compound (3.8 g, yield 66%).

Step 3: Production of 1-(4-benzyloxyphenyl)-2-bromo-2-cyclohexylethanone

1-(4-Benzyloxyphenyl)-2-cyclohexylethanone (1.0 g) obtained in the previous step was dissolved in 1,4-dioxane (10 ml) and bromine (0.17 ml) was added. The mixture was stirred for 10 min at room temperature. Saturated aqueous sodium hydrogencarbonate was added to the reaction mixture and the mixture was extracted with diethyl ether. The organic layer was washed with water and saturated brine and dried over anhydrous magnesium sulfate, and the solvent was evaporated under reduced pressure. The residue was purified by silica gel flash chromatography (developing solvent, n-hexane:ethyl acetate = 9:1) to give the title compound (696 mg, yield 55%).

¹H-NMR (300MHz, CDCl₃): 7.98(2H, d, J=8.9Hz), 7.28-7.48(5H, m), 7.02(2H, d, J=8.9Hz), 5.14(2H, s), 4.89(1H, d, J=9.3Hz), 0.86-3.30(11H, m)

Step 4: Production of ethyl 2-(4-benzyloxyphenyl)-3-cyclohexylimidazo[1,2-a]pyridine-7-carboxylate

Ethyl 2-aminopyridine-4-carboxylate (214 mg) prepared according to JP-A-8-48651, 1-(4-benzyloxyphenyl)-2-bromo-2-5 cyclohexylethanone (500 mg) obtained in the previous step and potassium carbonate (356 mg) were stirred for 5 hr with heating at 140°C. The reaction mixture was allowed to cool and chloroform was added. The insoluble materials were filtered off and the filtrate was concentrated under reduced pressure. The residue was purified by silica gel flash chromatography (developing solvent, n-hexane:ethyl acetate = 1:1) to give the title compound (95 mg, yield 16%).

APCI-MS: 455 (MH+)

¹H-NMR (300MHz, CDCl₃): 8.33(1H, s), 8.21(1H, d, J=7.5Hz), 7.55(2H, d, J=8.7Hz), 7.25-7.50(6H, m), 5.13(2H, s), 4.41(2H, q, J=7.1Hz), 3.25(1H, m), 1.41(3H, t, J=7.1Hz), 1.15-2.00(10H, m)

Example 602

Production of 2-(4-benzyloxyphenyl)-3-cyclohexylimidazo[1,2-a]pyridine-7-carboxylic acid

Ethyl 2-(4-benzyloxyphenyl)-3-cyclohexylimidazo[1,2-a]pyridine-7-carboxylate (95 mg) obtained in the previous step was treated in the same manner as in Example 2 to give the title compound (33 mg, 37%).

APCI-MS: 427 (MH+)

¹H-NMR (300MHz, DMSO-d₆): 8.67(1H, d, J=7.3Hz), 8.08(1H, s), 7.25-7.58(8H, m), 7.13(2H, d, J=8.7Hz), 5.17(2H, s), 3.23(1H, m), 1.25-2.10(10H, m)

The compounds shown in Tables 213 to 218 can be further obtained in the same manner as in Examples 1 to 703 or by other 30 conventional method employed as necessary.

The evaluation of the HCV polymerase inhibitory activity of the compound of the present invention is explained in the following. This polymerase is an enzyme coded for by the non-structural protein region called NS5B on the RNA gene of HCV 35 (EMBO J., 15:12-22, 1996).

Experimental Example [I]

i) Preparation of enzyme (HCV polymerase)

Using, as a template, a cDNA clone corresponding to the full length RNA gene of HCV BK strain obtained from the blood of a patient with hepatitis C, a region encoding NS5B (591 amino acids; J Virol 1991 Mar, 65(3), 1105-13) was amplified by PCR.

5 The objective gene was prepared by adding a 6 His tag {base pair encoding 6 continuous histidine (His)} to the 5' end thereof and transformed to Escherichia coli. The Escherichia coli capable of producing the objective protein was cultured. The obtained cells were suspended in a buffer solution containing a surfactant and crushed in a microfluidizer. The supernatant was obtained by centrifugation and applied to various column chromatographys {poly[U]-Sepharose, Sephacryl S-200, mono-S (Pharmacia)}, inclusive of metal chelate chromatography, to give a standard enzyme product.

15 ii) Synthesis of substrate RNA

Using a synthetic primer designed based on the sequence of HCV genomic 3' untranslated region, a DNA fragment (148 bp) containing polyU and 3'X sequence was entirely synthesized and cloned into plasmid pBluescript SK II(+) (Stratagene). The cDNA encoding full length NS5B, which was prepared in i) above, was digested with restriction enzyme KpnI to give a cDNA fragment containing the nucleotide sequence of from the restriction enzyme cleavage site to the termination codon. This cDNA fragment was inserted into the upstream of 3' untranslated region of the DNA in pBluescript SK II(+) and ligated. The about 450 bp inserted DNA sequence was used as a template in the preparation of substrate RNA. This plasmid was cleaved immediately after the 3'X sequence, linearized and purified by phenol-chloroform treatment and ethanol precipitation to give DNA.

RNA was synthesized (37°C, 3 hr) by run-off method using this purified DNA as a template, a promoter of pBluescript SK II(+), MEGAscript RNA synthesis kit (Ambion) and T7 RNA polymerase. DNaseI was added and the mixture was incubated for 1 hr. The template DNA was removed by decomposition to give a crude RNA product. This product was treated with phenol-chloroform and purified by ethanol precipitation to give the objective substrate RNA.

This RNA was applied to formaldehyde denaturation agarose gel electrophoresis to confirm the quality thereof and preserved at -80°C .

iii) Assay of enzyme (HCV polymerase) inhibitory activity

A test substance (compound of the present invention) and a reaction mixture (30 μ l) having the following composition were reacted at 25°C for 90 min.

10% Trichloroacetic acid at 4°C and 1% sodium pyrophosphate solution (150 μ l) were added to this reaction mixture to stop the reaction. The reaction mixture was left standing in ice for 15 min to insolubilize RNA. This RNA was trapped on a glass filter (Whatman GF/C and the like) upon filtration by suction. This filter was washed with a solution containing 1% trichloroacetic acid and 0.1% sodium pyrophosphate, washed with 90% ethanol and dried. A liquid scintillation cocktail (Packard) was added and the radioactivity of RNA synthesized by the enzyme reaction was measured on a liquid scintillation counter.

The HCV polymerase inhibitory activity (IC_{50}) of the compound of the present invention was calculated from the values of radioactivity of the enzyme reaction with and without the test substance.

The results are shown in Tables 178-184 and 222-224.

Reaction mixture: HCV polymerase (5 μ g/ml) obtained in i), substrate RNA (10 μ g/ml) obtained in ii), ATP (50 μ M), GTP (50 μ M), CTP (50 μ M), UTP (2 μ M), [5,6-3H]UTP (46 Ci/mmol (Amersham), 1.5 μ Ci) 20 mM Tris-HCl (pH 7.5), EDTA (1 mM), MgCl₂ (5 mM), NaCl (50 mM), DTT (1 mM), BSA (0.01%)

Formulation Example is given in the following. This example is merely for the purpose of exemplification and does not limit the invention.

Formulation Example

	(a)	compound of Example 1	10	g
	(b)	lactose	50	g
	(c)	corn starch	15	g
35	(d)	sodium carboxymethylcellulose	44	g
	(e)	magnesium stearate	1	a

The entire amounts of (a), (b) and (c) and 30 g of (d) are kneaded with water, dried in vacuo and granulated. The obtained

granules are mixed with 14~g of (d) and 1~g of (e) and processed into tablets with a tableting machine to give 1000 tablets each containing 10~mg of (a).

Table 1

Example No.	31 1H NMR(δ) ppm
	300MHz, CDC13 7.81(2H, d, J=6.6Hz), 7.60(2H, d, J=8.8Hz), 7.51-7.21(8H, m), 7.11(2H, d, J=8.8Hz), 5.15(2H, s), 4.93(1H, quin t, J=8.8Hz), 2.36-2.32(2H, m), 2.09-2.04(3H, m), 1.75- 1.68(3H, m).
Purity > 90% (NMR)	
MS 369 (M+1)	

Example No.	32	1H NMR(δ) ppm
		300MHz, CDC13 8.51 (1H, d, J=1.5Hz), 7.98 (1H, d, J=8.4Hz), 7.61 (2H, d, J=8.7Hz), 7.56-7.10 (6H, m), 7.12 (2H, d, J=8.7Hz), 5.15 (2H, s), 4.94 (1H, quint, J=9.3Hz), 4.41 (2H, q, J=7.5Hz), 2.40-1.50 (8H, m), 1.41 (3H, t, J=7.5Hz)
Purity > 90% (NMR)		
MS 441 (M+1)		

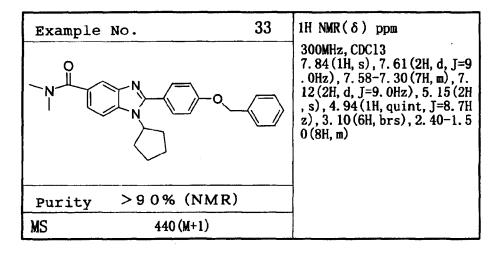


Table 2

Example No.	34	1H NMR(δ) ppm
		300MHz, CDC13 8. 20(1H, s), 7. 50-7. 31(9H, m), 7. 12(2H, d, J=8. 7Hz), 5. 15(2H, s), 4. 94(1H, quint, J=8. 7Hz), 3. 61(3H, s), 3. 40(3H, s), 2. 41-1. 42(8H, m)
Purity >90% (NMR))	
MS 456 (M+1)		

Example No.	35	1H NMR(δ) ppm
HOLONO	-	300MHz, CDC13 7.91(1H.s), 7.59(2H, d, J=8.7Hz), 7.49-7.30(7H, m), 7. 11(2H, d, J=8.8Hz), 5.15(2H, s), 4.19(1H, quint, J=8.8Hz), 2.41-2.22(2H, m), 2.13-1.49(14H, m)
Purity >90% (NMR)	
MS 427 (M+1)		

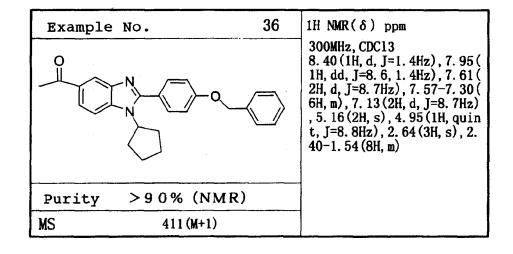


Table 3

Example No.	37	1H NMR(δ) ppm
2HCI	-	300MHz, DMSO-d6 10. 47 (1H, brs,), 9. 15 (1H, brs), 8. 40 (1H, s), 8. 07 (1H, d, J=9. 0Hz), 7. 93 (1H, d, J=8. 7Hz), 7. 77 (2H, d, J=8. 7Hz), 7. 55-7. 29 (7H, m), 5. 26 (2H, s), 4. 93 (1H, quint, J=9. 0Hz), 3. 77-3. 63 (2H, m), 3. 39-3. 23 (2H, m), 2. 84 (6H, d, J=4. 8Hz), 2. 32-1. 60 (8H, m)
Purity >90% (NMR)		
MS 483 (M+1)		

Example No. 38	1H NMR(δ) ppm
O_2N	300MHz, CDC13 8. 69 (1H, s), 8. 19 (1H, d, J=9 . 0Hz), 7. 62 (2H, d, J=8. 7Hz) , 7. 54 (1H, d, J=9. 0Hz), 7. 48 -7. 36 (5H, m), 7. 15 (2H, d, J= 8. 7Hz), 5. 17 (2H, s), 4. 98 (1 H, quint, J=9. 0Hz), 2. 27-2. 07 (6H, m), 1. 82-1. 78 (2H, m)
Purity > 90% (NMR)	
MS 414 (M+1)	

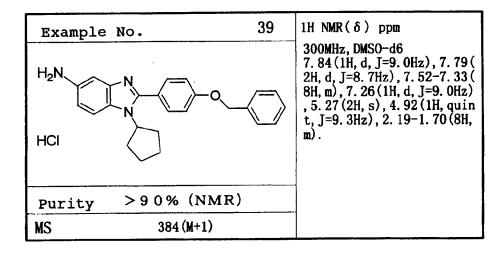


Table 4

Example No.	40	1H NMR(δ) ppm
O N N O		300MHz, CDC13 7. 72 (1H, s), 7.60-7.35 (10H, m), 7.10 (2H, d, J=8.7Hz), 5 .14 (2H, s), 4.90 (1H, quint, J=8.8Hz), 2.29-2.19 (2H, m), 2.19 (3H, s), 2.19-1.74 (6H, m).
Purity > 90% (NM)	R)	
MS 426 (M+1)		

Example No.	41	1H NMR(δ) ppm
o's o N		300MHz, CDC13 7. 66(1H, s), 7. 61(2H, d, J=8 .8Hz), 7. 50-7. 28(7H, m), 7. 12(2H, d, J=8. 8Hz), 6. 86(1H, brs), 5. 15(2H, s), 4. 94(1H, quint, J=8. 8Hz), 2. 97(3H, s), 2. 29-1. 76(8H, m).
Purity > 90%	(NMR)	
MS 462(M+1)	

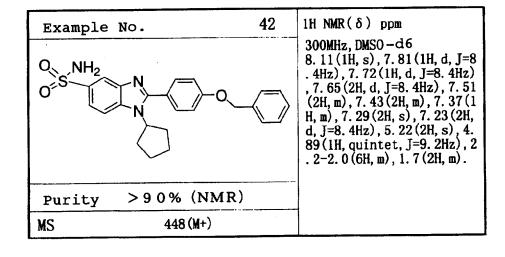


Table 5

Example No.	43	1H NMR(δ) ppm
HO	_	300MHz, DMSO-d6 8.33(1H, s), 8.08(1H, d, J=9 .0Hz), 7.99(1H, d, J=9.0Hz) , 7.47-7.41(4H, m), 7.33(2H , d, J=8.4Hz), 5.22(2H, s), 4 .96(1H, quint, J=9.0Hz), 2. 25-1.60(8H, m), 1.30(9H, s)
Purity >90% (NMR)		
MS 469 (M+1)		

Example No.	44	1H NMR(δ) ppm
HO NO	о // Он	300MHz, DMSO-d6 12.9(2H, brs), 8.25(1H, s), 8.00(2H, d, J=7.8Hz), 7.90(1H, d, J=8.4Hz), 7.74(1H, d, J=8.7Hz), 7.67(2H, d, J=9.0 Hz), 7.62(2H, d, J=8.1Hz), 7.24(2H, d, J=8.4Hz), 5.32(2 H, s), 4.88(1H, quint, J=9.0 Hz, 2.25-1.60(8H, m).
Purity > 90% (NMR)		
MS 457 (M+1)		

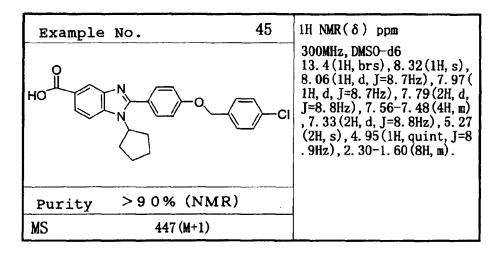


Table 6

Example No. 46	1H NMR(δ) ppm
HO S C	300MHz, DMSO-d6 8. 33 (1H, s), 8. 07 (1H, d, J=8 . 7Hz), 7. 98 (1H, d, J=8. 7Hz) , 7. 80 (2H, d, J=8. 4Hz), 7. 34 (2H, d, 8. 4Hz), 7. 19 (1H, d, J =3. 6Hz), 7. 09 (1H, d, J=3. 6H z), 5. 41 (2H, s), 4. 95 (1H, qu int, J=8. 7Hz), 2. 30-1. 60 (8 H, m).
Purity > 90% (NMR)	
MS 453 (M+1)	

Example No.		1H NMR(δ) ppm	
HO N	−CF ₃	300MHz, DMSO-d6 8.33(1H, s), 8.07(1H, d, J= .4Hz), 7.98(1H, d, J=9.0Hz , 7.82-7.72(6H, m), 7.35(2 , d, J=9.0Hz), 5.40(2H, s), .95(1H, quint, J=8.7Hz), 2 35-1.60(8H, m).	
Purity > 90% (NMR)			
MS 481 (M+1)			

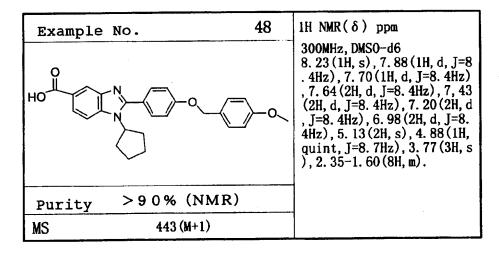


Table 7

Example No.	49	1H NMR(δ) ppm
HO NO	HCI	300MHz, DMSO-d6 8. 93(2H, d, J=6.6Hz), 8. 35(1H, s), 8. 06-8. 04(3H, m), 7. 97(1H, d, J=8.7Hz), 7. 83(2H, d, J=8.7Hz), 7. 38(2H, d, J=8.7Hz), 5. 61(2H, s), 4. 94(1H, quint, J=8.7Hz), 2. 40-1. 60(8H, m).
Purity >90% (NMR)		·
MS 414 (M+1)		

Example No.	50	1H NMR(δ) ppm
но	→ 0	300MHz, DMSO-d6 8. 33(1H, s), 8. 08(1H, d, J=8 .7Hz), 7. 99(1H, d, J=9. 0Hz) , 7. 78(2H, d, J=8. 4Hz), 7. 39 (2H, d, J=8. 1Hz), 7. 32(2H, d , J=8. 7Hz), 7. 23(2H, d, J=7. 8Hz), 5. 22(2H, s), 4. 96(1H, quint, J=9. 0Hz), 2. 32(3H, s), 2. 30-1. 60(8H, m).
Purity >90%	(NMR)	
MS 427	(M+1)	

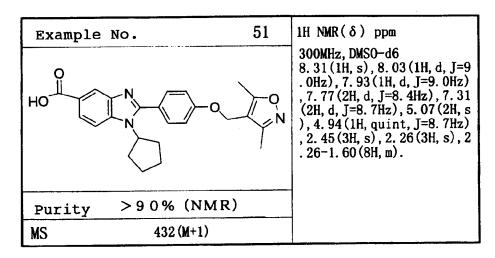


Table 8

Example No.	52	1H NMR(δ) ppm
HO	∕—он	300MHz, DMSO-d6 12.7(1H, brs), 10.0(1H, s), 8.22(1H, s), 7.87(1H, d, J=8 .6Hz), 7.69(1H, d, J=8.6Hz), 7.53(2H, d, J=8.6Hz), 6.96 (2H, d, J=8.6Hz), 4.89(1H, q uint, J=9.0Hz), 2.30-1.60(8H, m).
Purity > 90% (NM	R)	
MS 323 (M+1)		

Example No.	53	1H NMR(δ) ppm
HOTH	-	300MHz, DMSO-d6 9. 18 (1H, t, J=5. 6Hz), 8. 34 (1H, s), 8. 04 (1H, d, J=9. 6Hz), 7. 98 (1H, d, J=8. 7Hz), 7. 52-7. 32 (7H, m), 5. 27 (2H, s), 4. 95 (1 H, quint, J=9. 0Hz), 3. 99 (2H, d, J=5. 7Hz), 2. 40-1. 60 (8H, m).
Purity > 90% (NMR)		
MS 470 (M+1)		

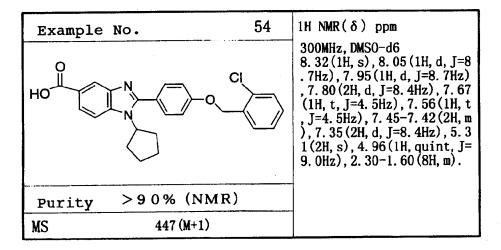


Table 9

Example No.	55	1H NMR(δ) ppm
HO N	OI	300MHz, DMSO-d6 12.78(1H, br s), 8.24(1H, s), 7.88and7.7 2(2H, ABq, J=8.6Hz), 7.66an d7.23(4H, A'B'q, J=8.6Hz), 7.58(1H, s), 7.48-7.42(3H, m), 5.24(1H, s), 4.88(1H, qu int, J=8.8Hz), 2.30-1.91(6 H, m), 1.78-1.60(2H, m)
Purity > 90% (NM	MR)	
MS 447 (M+1)		

Example No.	56	1H NMR(δ) ppm
HO NO O		300MHz, DMSO-d6 12.89(1H, broad), 8.18(1H, s), 7.87(1H, d, J=8.4Hz), 7.74(1H, d, J=9.2Hz), 7.67(2H, d, J=8.8Hz), 7.52(2H, m), 7.45(2H, m), 7.38(1H, m), 7.23(2H, d, J=8.8Hz), 5.22(2H, s), 4.94(1H, quintet, J=8.9Hz), 2.16(4H, m), 1.98(2H, m), 1.73(2H, m).
Purity >90% (NMR	.)	
MS 413 (M+)		

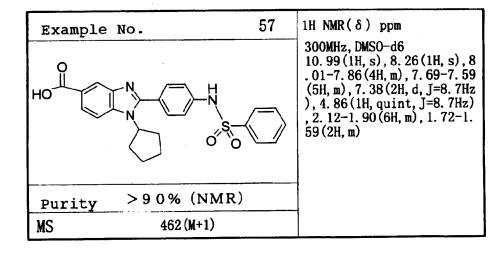


Table 10

Example	No.	58	1H NMR(δ) ppm
НО		CI	300MHz, DMSO-d6 12.78(1H.s), 10.69(1H,s), 8.26-7.72(9H,m), 4.92(1H, quint, J=9.0Hz), 2.34-1.70 (6H,m), 1.75-1.61(2H,m)
Purity	>90% (NM	R)	
MS	494 (M+1)		

Example No.	59	1H NMR(δ) ppm
но)—H ———————————————————————————————————	300MHz, DMSO-d6 10.82(1H, s), 8.34(1H, s), 8 .14and7.84(4H, ABq, J=8.4H z), 8.06and7.66(4H, A'B'q, J=8.6Hz), 8.06-7.98(4H, m) ,5.01(1H, quint, J=9.3Hz), 2.35-2.15(4H, m), 2.11-1.9 6(2H, m), 1.80-1.62(2H, m)
Purity >909	6 (NMR)	
MS 46	0 (M+1)	

Example No.	60	1H NMR(δ) ppm
HO NOTE OF THE PERSON OF THE P		300MHz, DMSO-d6 10.61(1H, s), 8.32(1H, s), 8 .12and7.81(4H, ABq, J=8.9H z), 8.03and7.93(2H, A'B'q, J=8.7Hz), 7.95and7.59(4H, A"B"q, J=8.4Hz), 4.99(1H, q uint, J=9.0Hz), 2.33-2.12(4H, m), 2.10-1.93(2H, m), 1. 80-1.63(2H, m), 1.34(9H, m)
Purity >90% (NMR	.)	
MS 482 (M+1)		

Table 11

Example No.	61	1H NMR(δ) ppm
но		300MHz, DMSO-d6 10.6(1H, s), 8.34(1H, s), 8. 13(2H, d, J=8.7Hz), 8.09-7. 98(4H, m), 7.82(2H, d, J=8.7 Hz), 7.50-7.35(5H, m), 7.20 -7.17(2H, d, J=9.0Hz), 5.24 (2H, s), 5.01(1H, quint, J=9.3Hz), 2.40-1.60(8H, m).
Purity >90% (NMR)		
MS 532 (M+1)		

Example No. 62	1H NMR(δ) ppm
HO NO	300MHz, DMSO-d6 8. 32 (1H, s), 8. 26 (1H, d, J=8 .7Hz), 8. 04 (1H, d, J=8. 7Hz) ,7. 77 (2H, d, J=8. 4Hz), 7. 52 (2H, d, J=6. 9Hz), 7. 46-7. 39 (5H, m), 5. 28 (2H, s), 4. 38 (1 H, m), 3. 71 (1H, m), 2. 60-2. 1 5 (2H, m), 2. 04-1. 96 (4H, m), 1. 30-1. 20 (2H, m).
Purity >90% (NMR)	
MS 443(M+1)	

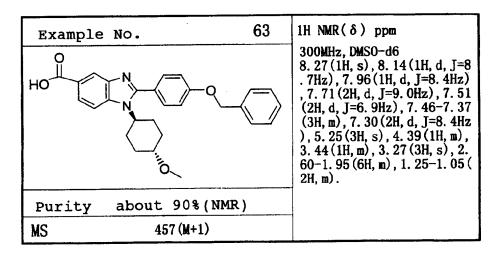


Table 12

Example No.	64	1H NMR(δ) ppm
HO N Q		300MHz, DMSO-d6 12.25(1H, brs), 7.70-7.30(9H, m), 7.20(2H, d, J=8.7Hz), 7.14(1H, d, J=8.4Hz), 5.20 (2H, s), 4.84(1H, quint, J=6.0Hz), 3.66(2H, s), 2.30-1. 51(8H, m)
Purity >90% (NMR)		
MS 427 (M+1)		

Example No.	65	1H NMR(δ) ppm
HO N-		300MHz, DMSO-d6 12.64(1H, brs), 8.13(1H, s), 7.80(1H, d, J=7.2Hz), 7.59 (1H, d, J=8.7Hz), 7.48-7.30 (5H, m), 5.11(2H, s), 5.03(1 H, quint, J=8.7Hz), 4.20-4. 05(2H, m), 3.45-3.90(3H, m), 2.15-1.60(12H, m)
Purity >90% (N	MR)	
MS 448 (M+1)	

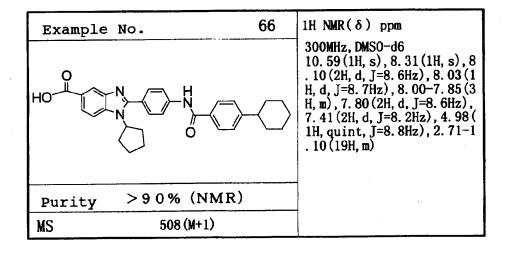


Table 13

Example No.	67	1H NMR(δ) ppm
но		300MHz, DMSO-d6 12.81(1H, brs), 8.42(1H, s), 7.90(1H, d, J=8.5Hz), 7.80 -7.52(6H, m), 7.44(2H, d, J=8.6Hz), 5.25(2H, s), 4.88(1 H, quimt, J=8.8Hz), 2.30-1. 52(8H, m)
Purity > 90% (NM	R)	
MS 481 (M+1)		

Example No.	68	1H NMR(δ) ppm
HO NO	CI	300MHz, DMSO-d6 8. 31 (1H, d, J=1. 4Hz), 8. 05 (1H, d, J=8. 6Hz), 7. 96 (1H, d, J=8. 6Hz), 8. 86-8. 61 (4H, m) ,7. 51 (1H, d, J=6. 3Hz), 7. 33 (2H, d, J=8. 8Hz), 5. 28 (2H, s)), 4. 94 (1H, quint, J=8. 8Hz) ,2. 31-1. 60 (8H, m)
Purity >90% (N	MR)	
MS 481 (M+1)	

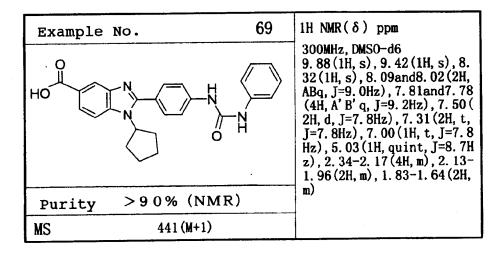
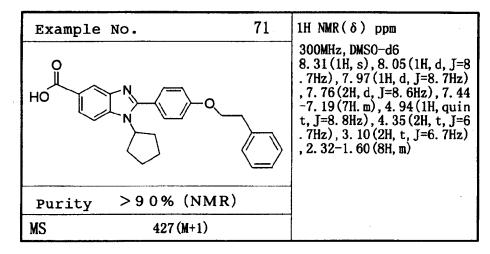


Table 14

Example No.	70	1H NMR(δ) ppm
HO N		300MHz, DMSO-d6 8. 27(1H, d, J=1. 2Hz), 8. 04(1H, d, J=8. 7Hz), 7. 94(1H, d, J=8. 7Hz), 7. 72(2H, d, J=8. 7Hz), 7. 60-7. 20(12H, m) 6. 74(1H, s), 4. 92(1H, quint, J=8. 9Hz), 2. 30-1. 58(8H, m)
Purity > 90% (NMR)		
MS 489 (M+1)		



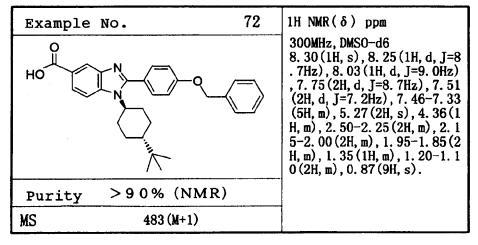


Table 15

Example No.	73	1H NMR(δ) ppm
HO NO O	\rightarrow	300MHz, DMSO-d6 7.59(2H, d, J=8.4Hz), 7.52- 7.35(6H, m), 7.20(2H, d, J=8 .7Hz), 7.14(1H, d, J=2.1Hz) ,6.90(1H, dd, J=9.0, 2.4Hz) ,5.21(2H, s), 4.83(1H, quin t, J=8.7Hz), 4.70(2H, s), 2. 30-1.90(6H, m), 1.75-1.55(2H, m).
Purity > 90% (NMR)		
MS 443 (M+1)		

Example	No.	74	1H NMR(δ) ppm
но			300MHz, DMSO-d6 8. 27 (1H, s), 8. 06and7. 97 (2 H, ABq, J=8. 7Hz), 7. 57and6. 86 (4H, A'B'q, J=8. 9Hz), 7. 4 2-7. 26 (5H, m), 5. 04 (1H, qui nt, J=9. 0Hz), 4. 42 (2H, s), 2 .32-1. 94 (6H, m), 1. 80-1. 62 (2H, m)
Purity	>90% (NMR)		·
MS	412(M+1)		

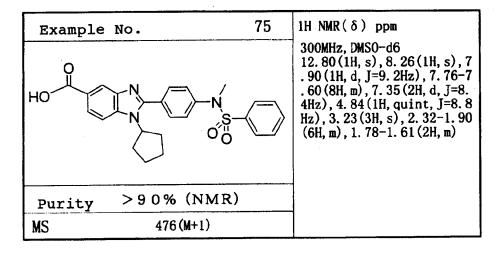


Table 16

Example No.	76	1H NMR(δ) ppm
HO N N		300MHz, DMSO-d6 8. 29 (1H, s), 8. 07and7. 49 (2 H, ABq, J=8. 7Hz), 7. 66and7. 00 (4H, A'B'q, J=7. 7Hz), 7. 3 9-7. 24 (5H, m), 5. 05 (1H, qui nt, J=8. 8Hz), 4. 76 (2H, s), 3 . 21 (3H, s), 2. 35-1. 92 (6H, m)), 1. 81-1. 62 (2H, m)
Purity > 90% (NMR))	
MS 426 (M+1)		

Example No.	77	1H NMR(δ) ppm
HO N		300MHz, DMSO-d6 8. 21 (1H, s), 7. 87 (1H, s), 7. 56and7. 43 (4H, ABq, J=8. 1Hz), 7. 34-7. 16 (5H, m), 4. 25 (1 h, brt, J=12. 5Hz), 3. 06-2. 9 2 (4H, m), 2. 41-2. 17 (2H, m), 1. 96-1. 77 (4H, m), 1. 72-1. 5 8 (1H, m), 1. 48-1. 15 (3H, m)
Purity >90% (NMR)		
MS 425 (M+1)		

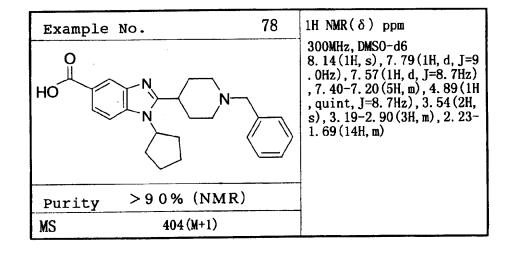


Table 17

Example No. 79	1H NMR(δ) ppm
HO N O	300MHz, DMSO-d6 8. 15(1H, s), 7. 81(1H, d, J=8 .4Hz), 7. 59(1H, d, J=9. 0Hz) , 7. 50-7. 38(5H, m), 5. 05(1H , quint, J=9. 0Hz), 3. 85-2. 9 5(3H, m), 2. 20-1. 65(14H, m)
Purity >90% (NMR)	
MS 418 (M+1)	

Example No.	80 1H NMR(δ) ppm	
HO N S	300MHz, DMS0-d6 8. 17 (1H, m), 7. 84 (.4Hz), 7. 78-7. 62 (49 (2H, d, J=8. 1Hz) 91 (1H, m), 3. 80-3. , 3. 30-3. 12 (1H, m) 31 (5H, m), 2. 15-1.	3H, m), 7. , 5. 05-4. 70(2H, m) . 2. 48-2.
Purity >90% (NMR)		
MS 468 (M+1)		

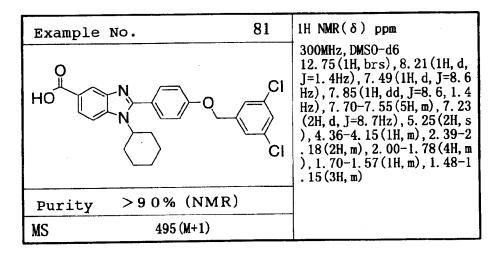


Table 18

Example No. 82	
HO N O	300MHz, DMSO-d6 8. 27(1H, s), 8. 22(1H, d, J=8 . 7Hz), 8. 02(1H, d, J=8. 7Hz) , 7. 69(2H, d, J=8. 7Hz), 7. 60 -7. 50(4H, m), 7. 45-7. 25(8H , m), 6. 75(1H, s), 4. 21-4. 23 (1H, m), 2. 39-2. 18(2H, m), 2 . 10-1. 78(4H, m), 1. 70-1. 15 (4H, m)
Purity >90% (NMR)	
MS 503 (M+1)	

Example No.	83	1H NMR(δ) ppm
HO N O		300MHz, DMSO-d6 13.2(1H, brs), 8.30(1H, s), 8.23(1H, d, J=8.8Hz), 8.02(1H, d, J=8.7Hz), 7.74(2H, d, J=8.6Hz), 7.40-7.33(5H, m), 5.22(2H, s), 4.36(1H, m), 2 .50-1.40(10H, m), 1.31(18H, s).
Purity > 90% (NMR)	,, <u>.</u>	
MS 539 (M+1)		

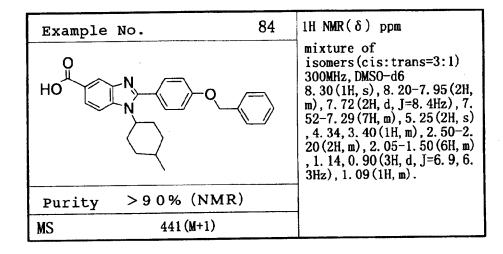


Table 19

Example No.	85	1H NMR(δ) ppm
HO NO S		300MHz, DMSO-d6 8. 25(1H, s), 8. 14-7. 83(6H, m), 7. 77-7. 44(5H, m), 7. 21(2H, d, J=7. 8Hz), 4. 44(2H, brt), 4. 31(1H, brt), 3. 56(2H, brt), 2. 20-2. 16(2H, m), 2. 00-1. 74(4H, m), 1. 70-1. 55(1H, m), 1. 45-1. 14(3H, m)
Purity > 90% (NMR)		
MS 491 (M+1)		

Example No.	86	1H NMR(δ) ppm
HO N O		300MHz, DMSO-d6 12.75(1H, s), 8.23(1H, s), 8 .15(1H, d, J=7.6Hz), 8.02-7 .53(10H, m), 7.32(2H, d, J=8 .7Hz), 5.68(2H, s), 4.32(1H, brt, J=12.2Hz), 2.41-2.20 (2H, m), 2.01-1.78(4H, m), 1 .71-1.56(1H, m), 1.50-1.16 (3H, m)
Purity >90% (NMR	.)	·
MS 477 (M+1)		

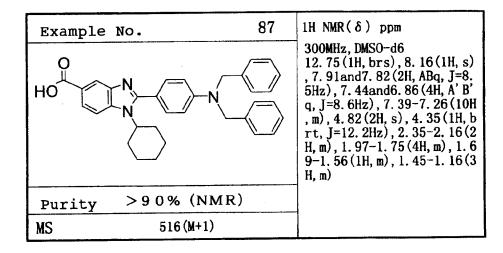


Table 20

Example No. 88	1H NMR(δ) ppm
HO N O	300MHz, DMSO-d6 8. 31 (1H, s), 8. 26and8. 06 (2 H, ABq, J=8. 9Hz), 7. 73and7. 22 (4H, A'B'q, J=8. 7Hz), 7. 5 0-7. 36 (8H, m), 5. 10 (2H, s), 4. 37 (1H, brt, J=12. 2Hz), 2. 38-2. 28 (2H, m), 2. 10-1. 80 (4H, m), 1. 70-1. 56 (1H, m), 1. 50-1. 20 (3H, m)
Purity >90% (NMR)	
MS 503 (M+1)	

Example No.	89	1H NMR(δ)	ppm
HO N O			
Purity 91% (HPLC	2)		
MS 427 (M+1)			

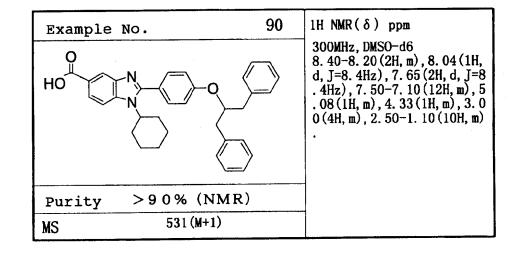
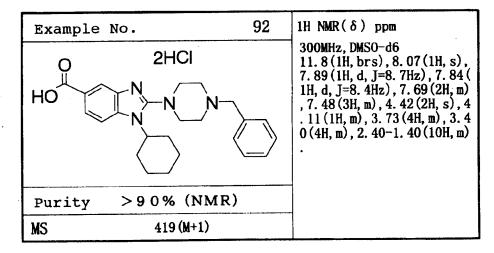


Table 21

Example No.	91	1H NMR(δ) ppm
HO N O	<u></u>	300MHz, DMSO-d6 8.31(1H, s), 8.27(1H, d, J=8 .7Hz), 8.08-8.03(3H, m), 7. 77-7.58(5H, m), 7.31(2H, d, J=8.7Hz), 5.81(2H, s), 4.40 (1H, m), 2.50-1.20(10H, m).
Purity about 90%(NMR)		
MS 455 (M+1)		



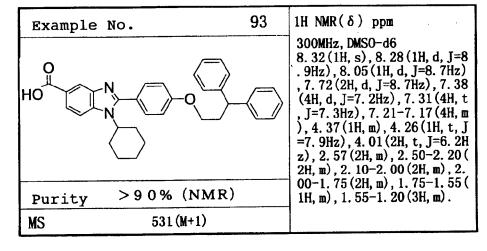


Table 22

Example No. 94	1H NMR(δ) ppm
O N O O O O O O O O O O O O O O O O O O	300MHz, DMSO-d6 8. 32 (1H, s), 8. 27 (1H, d, J=9 . 0Hz), 8. 05 (1H, d, J=8. 7Hz) , 7. 75-7. 70 (3H, m), 7. 56 (1H , d, J=8. 4Hz), 7. 55-7. 35 (6H , m), 7. 22 (2H, d, J=8. 7Hz), 5 . 11 (2H, s), 4. 36 (1H, m), 2. 4 0-2. 15 (2H, m), 2. 15-1. 95 (2 H, m), 1. 95-1. 75 (2H, m), 1. 7 5-1. 55 (1H, m), 1. 55-1. 20 (3
Purity >90% (NMR)	H, m).
MS 537 (M+1)	

Example No.	95	1H NMR(δ) ppm
HO N N N O	—	300Hz, DMSO-d6 12.9(1H, brs), 8.02(1H, s), 7.82(2H, m), 7.40-7.25(5H, m), 4.58(2H, s), 4.09(1H, m), 3.71(1H, m), 3.49(2H, m), 3.21(2H, m), 2.35-1.30(14H, m).
Purity >90% (NMF	()	
MS 434 (M+1)		

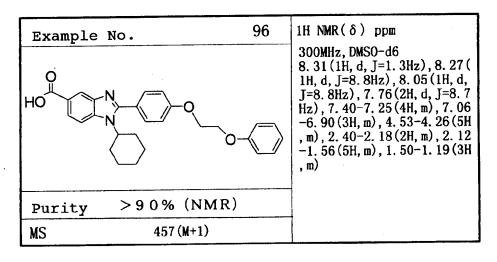


Table 23

Example No.	97	1H NMR(δ) ppm
HO N O		300MHz, DMSO-d6 8. 32 (1H, d, J=1. 3Hz), 8. 29 (1H, d, J=8. 8Hz), 8. 05 (1H, dd , J=8. 8, 1. 3Hz), 8. 42 (2H, d, J=8. 8Hz), 7. 37-7. 16 (7H, m) , 4. 48-4. 30 (1H, m), 4. 12 (2H , t, J=6. 2Hz), 2. 83-2. 70 (2H , m), 2. 40-1. 50 (9H, m), 1. 59 -1. 19 (3H, m)
Purity > 90% (NM	R)	·
MS 455 (M+1)		

Example No.	8 1H NMR(δ) ppm
HO NO	300MHz, DMSO-d6 8. 28 (1H, d, J=1. 3Hz), 8. 21 (1H, d, J=8. 8Hz), 8. 01 (1H, d, J=10. 1Hz), 7. 70 (2H, d, J=8. 7Hz), 7. 33-7. 12 (7H, m), 4. 4 4-4. 28 (1H, m), 4. 10 (2H, t, J =6. 3Hz), 2. 62 (2H, t, J=7. 4H z), 2. 39-2. 15 (2H, m), 2. 10- 1. 18 (14H, m)
Purity > 90% (NMR)	
MS 483 (M+1)	

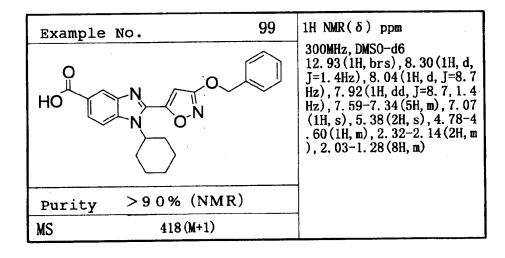


Table 24

Example No.	100	1H NMR(δ) ppm
NaO		300MHz, DMSO-d6 8. 46 (1H, d, J=2. 1Hz), 8. 16 (1H, s), 8. 00 (1H, dd, J=8. 5, 2 . 1Hz), 7. 87 (1H, d, J=8. 5Hz), 7. 68 (1H, d, J=8. 5Hz), 7. 55 -7. 30 (5H, m), 7. 08 (1H, d, J=8. 5Hz), 5. 45 (2H, s), 4. 25-4 . 08 (1H, m), 2. 39-2. 18 (2H, m), 2. 00-1. 75 (4H, m), 1. 70-1 . 55 (1H. m), 1. 45-1. 19 (3H, m)
Purity > 90% (NMR))
MS 427 (M+1)		

Example No.	101	1H NMR(δ) ppm
H ₃ C-	O CH ₃	300MHz, DMSO-d6 8. 33(1H, s), 8. 31(1H, d, J=6 .9Hz), 8. 06(1H, d, J=8. 4Hz) , 7. 76and7. 29(4H, ABq, J=8. 9Hz), 6. 68(2H, s), 4. 37(1H, m), 4. 35(2H, t, J=7. 0Hz), 3. 79(6H, s), 3. 63(3H, s), 3. 04 (2H, t, J=6. 9Hz), 2. 30(2H, m), 2. 04(2H, m), 1. 86(2H, m), 1. 65(1H, m), 1. 50-1. 15(3H,
Purity >90% (1	NMR)	m)
MS 531 (M+	-1)	

Example No. 102	1H NMR(δ) ppm
HO N O CH ₃	300MHz, DMSO-d6 12.88(1H, s), 8.34(1H, s), 7 .86(1H, d, J=8.5Hz), 7.73(1 H, d, J=8.5Hz), 7.63and7.23 (4H, ABq, J=8.7Hz), 7.52-7. 35(5H, m), 5.22(2H, s), 4.31 (1H, m), 2.39(2H, m), 1.79(2 H, m), 1.53(2H, m), 1.31(2H, m), 1.11(3H, s), 0.95(3H, s)
Purity > 90% (NMR)	
MS 455 (M+1)	

Table 25

Example No. 103	1H NMR(δ) ppm
HO N O	300MHz, DMS0-d6 12. 79(1H, brs), 8. 22(2H, s), 8. 02-7. 78(4H, m), 7. 63-7. 42(6H, m), 7. 20-7. 09(2H, m), 4. 43(2H, s), 4. 27(1H, brt, J=12. 2Hz), 3. 59(2H, s), 2. 3 9-2. 15(2H, m), 1. 98-1. 72(4H, m), 1. 68-1. 59(1H, m), 1. 4 3-1. 12(3H, m)
Purity >90% (NMR)	
MS 491 (M+1)	

Example No.	104	1H NMR(δ) ppm
HO N O		300MHz, DMSO-d6 12.75(1H, s), 8.23(1H, s), 7 .94and7.86(2H, ABq, J=8.6H z), 7.64and7.05(4H, A'B'q, J=8.7Hz), 7.32-7.09(9H, m) ,5.13(2H, s), 4.28(1H, brt, J=12.2Hz), 2.36-2.19(2H, m)), 1.95-1.77(4H, m), 1.66-1 .56(1H, m), 1.46-1.10(3H, m)
Purity > 90% (NMR)		
MS 519 (M+1)		

Example No. 105	1H NMR(δ) ppm
HO N O	300MHz, DMSO-d6 8. 23 (1H, s), 7. 94and7. 87 (2 H, ABq, J=8. 6Hz), 7. 68and7. 17 (4H, A'B'q, J=8. 7Hz), 7. 4 6-7. 33 (6H, m), 6. 93and6. 75 (2H, A"B"q, J=8. 2Hz), 6. 82 (1H, s), 5. 13 (2H, s), 4. 30 (1H , brt, J=12. 2Hz), 2. 39-2. 18 (2H, m), 1. 98-1. 77 (4H, m), 1 .71-1. 59 (1H, m), 1. 48-1. 20
Purity >90% (NMR)	(3H, m)
MS 519(M+1)	

Table 26

Example No.	106	1H NMR(δ) ppm
HO N	O OH	300MHz, DMSO-d6 12.89(1H, brs), 9.73(1H, s), 8.24(1H, s), 8.03and7.91(2H, ABq, J=8.7Hz), 7.66and7.04(4H, A'B'q, J=8.7Hz), 7.16-7.03(3H, m), 6.89(2H, t, J=9.2Hz), 4.33(1H, brt, J=12.2Hz), 2.40-2.18(2H, m), 2.00-1.78(4H, m), 1.70-1.58(1H, m), 1.50-1.20(3H, m)
Purity >90% (NM	(R)	·
MS 429 (M+1)		

Example No.	107	1H NMR(δ) ppm
O HO N	ОН	300MHz, DMSO-d6 12.98(1H, brs), 9.82(1H, brs), 8.27(1H, s), 8.09and7.9 4(2H, ABq, J=8.7Hz), 7.74an d7.22(4H, A'B'q, J=8.7Hz), 7.28-7.22(1H, m), 6.67-6.5 4(3H, m), 4.35(1H, brt, J=12 .2Hz), 2.40-2.20(2H, m), 2. 05-1.80(4H, m), 1.72-1.59(1H, m), 1.50-1.21(3H, m)
Purity >90	% (NMR)	
MS 4	29 (M+1)	

Example No. 10	8 1H NMR(δ) ppm
HO N O	300MHz, DMSO-d6 8. 24 (1H, s), 8. 01and7. 90 (2 H, ABq, J=8. 7Hz), 7. 65and7. 03 (4H, A'B' q, J=8. 7Hz), 7. 3 2-7. 20 (3H, m), 7. 08-7. 03 (1 H, m), 4. 32 (1H, brt, J=12. 2H z), 3. 77 (3H, s), 2. 36-2. 20 (2H, m), 2. 00-1. 78 (4H, m), 1. 71-1. 59 (1H, m), 1. 44-1. 11 (3H, m)
Purity >90% (NMR)	
MS 443 (M+1)	

Table 27

Example No.	109	1H NMR(δ) ppm
HO N		300MHz, DMSO-d6 12.75(1H, s), 8.24(1H, s), 7 .96and7.87(2H, ABq, J=9.0H z), 7.69and7.19(4H, A'B'q, J=8.6Hz), 7.37(1H, t, J=7.1 Hz), 6.84-6.70(3H, m), 4.31 (1H, brt, J=12.2Hz), 3.78(3 H, s), 2.39-2.20(2H, m), 1.9 8-1.78(4H, m), 1.76-1.60(1 H, m), 1.48-1.13(3H, m)
Purity > 90%	(NMR)	·
MS 443	(M+1)	

Example No. 110	1H NMR(δ) ppm
HO N O O	300MHz, DMSO-d6 8. 31 (1H, s), 8. 26and8. 04 (2 H, ABq, J=8. 8Hz), 7. 75and7. 71 (4H, A'B'q, J=8. 8Hz), 7. 3 2-7. 03 (4H, m), 4. 34 (1H, brt , J=12. 2Hz), 3. 94 (2H, t, J=6 . 3Hz), 2. 40-2. 19 (2H, m), 2. 11-1. 81 (4H, m), 1. 72-1. 16 (6H, m), 0. 71 (3H, t, J=7. 3Hz)
Purity > 90% (NMR)	
MS 471 (M+1)	

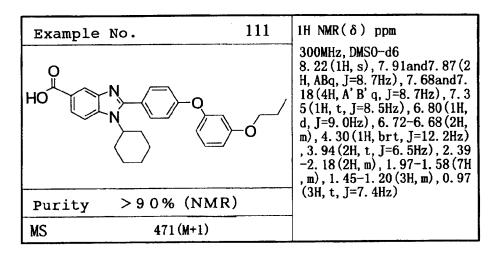


Table 28

Example No.	112	1H NMR(δ) ppm
HO N O		300MHz, DMSO-d6 12. 73 (1H, s), 8. 22 (1H, s), 7 .94and7. 85 (2H, ABq, J=9. 3H z), 7. 61and7. 01 (4H, A' B' q, J=8. 6Hz), 7. 25-7. 00 (4H, m) ,5. 25 (2H, brs), 4. 55 (2H, d, J=6. 6Hz), 4. 29 (1H, brt, J=1 2. 2Hz), 2. 38-2. 18 (2H, m), 1 .96-1. 78 (4H, m), 1. 70-1. 56 (1H, m), 1. 67 (3H, s), 1. 60 (3
Purity >90% (NMR)	H, s), 1.48-1.15(3H, m)
MS 497 (M+1)		·

Example No.	113	1H NMR(δ) ppm
HO N O	<u></u>	300MHz, DMSO-d6 12. 75 (1H, s), 8. 23 (1H, s), 7 .95and7. 86 (2H, ABq, J=8. 9H z), 7. 69and7. 18 (4H, A'B'q, J=8. 9Hz), 7. 35 (1H, t, J=8. 3 Hz), 6. 81-6. 69 (3H, m), 5. 41 (2H, brs), 4. 54 (2H, d, J=6. 6 Hz), 4. 31 (1H, brt, J=12. 2Hz), 2. 41-2. 18 (2H, m), 1. 98-1 .76 (4H, m), 1. 73 (3H, s), 1. 7
Purity > 90% (NMR)		0-1.58(1H, m), 1.68(3H, s), 1.45-1.17(3H, m)
MS 497 (M+1)		

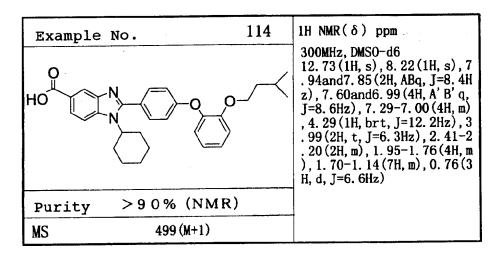


Table 29

Example No.	.15	1H NMR(δ) ppm
HO N O	<i>></i>	300MHz, DMSO-d6 8. 23 (1H, s), 7. 93and7. 87 (2 H, ABq, J=8. 6Hz), 7. 69and7. 19 (4H, A'B'q, J=8. 6Hz), 7. 3 5 (1H, t, J=7. 8Hz), 6. 82-6. 6 9 (3H, m), 4. 30 (1H, brt, J=12 . 2Hz), 4. 00 (2H, t, J=6. 9Hz) , 2. 38-2. 20 (2H, m), 1. 97-1. 54 (8H, m), 1. 47-1. 20 (3H, m) , 0. 93 (6H, d, J=6. 6Hz)
Purity > 90% (NMR)		
MS 499 (M+1)		

Example No.	116	1H NMR(δ) ppm
HO N ON		300MHz, DMSO-d6 8. 30 (1H, s), 8. 25 (1H, d, J=8 .9Hz), 8. 03 (1H, d, J=8. 8Hz), 7. 68 (2H, d, J=8. 8Hz), 7. 24 (2H, d, J=7. 2Hz), 7. 19-7. 10 (6H, m), 6. 94 (2H, t, J=7. 2Hz), 4. 34 (1H, m), 4. 19 (4H, brs), 3. 10 (4H, brs), 2. 40-2. 15 (2H, m), 2. 10-1. 95 (2H, m), 1. 95-1. 75 (2H, m), 1. 75-1. 55
Purity > 90% (NMR)		(1H, m), 1.55-1.20(3H, m).
MS 557 (M+1)		

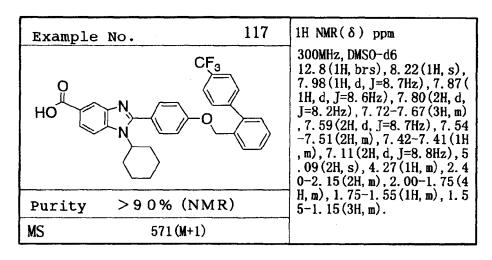
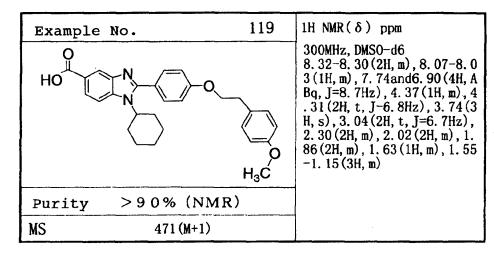


Table 30

Example No. 11	8 1H NMR(δ) ppm
HO N O CI	300MHz, DMSO-d6 13.3(1H, brs), 8.30(1H, s), 8.25(1H, d, J=8.9Hz), 8.04(1H, d, J=8.7Hz), 7.72(2H, d, J=8.8Hz), 7.57(4H, d, J=8.6 Hz), 7.47(4H, d, J=8.6Hz), 7 .33(2H, d, J=8.9Hz), 6.84(1 H, s), 4.33(1H, m), 2.45-2.1 0(2H, m), 2.10-1.95(2H, m), 1.95-1.70(2H, m), 1.70-1.5
Purity > 90% (NMR)	5 (1H, m), 1. 55-1. 15 (3H, m).
MS 571 (M+1)	



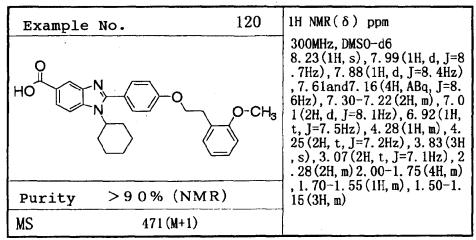


Table 31

Example No.		1H NMR(δ) ppm
HO N O	-O CH₃	300MHz, DMSO-d6 12. 85 (1H, brs), 8. 24 (1H, s), 8. 01 (1H, d, J=8. 7Hz), 7. 90 (1H, d, J=8. 6Hz), 7. 62and, 7. 17 (4H, ABq, J=8. 7Hz), 7. 24 (1H, m), 6. 94 (2H, m), 6. 82 (1H, m), 4. 32 (2H, t, J=6. 7Hz), 3. 76 (3H, s), 3. 07 (2H, t, J=6. 7Hz), 2. 29 (2H, m), 2. 00-1. 75 (4H, m), 1. 70-1. 55 (1H, m)
Purity > 90% (NMR)		, 1. 50-1. 15 (3H, m)
MS 471 (M+1)		

Example No.	122	1H NMR(δ) ppm
HO NO O		300MHz, DMSO-d6 12.8(1H, brs), 8.22(1H, s), 7.87(2H, m), 7.62(2H, d, J=8 .1Hz), 7.60-7.20(7H, m), 5. 23(2H, s), 4.46(1H, m), 2.50 -2.30(2H, m), 1.70-1.40(10 H, m).
Purity > 90% (NMR)		
MS 441 (M+1)		

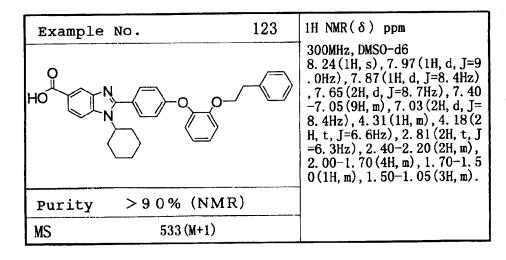


Table 32

Example No.	124	1H NMR(δ) ppm
HO N O		300MHz, DMSO-d6 13. 1 (1H, brs), 8. 29 (1H, s), 8. 17 (1H, d, J=8. 7Hz), 7. 99 (1H, d, J=8. 7Hz), 7. 77 (2H, d, J=8. 7Hz), 7. 40-7. 20 (8H, m), 6. 84 (1H, d, J=9. 3Hz), 6. 75-6. 72 (2H, m), 4. 36 (1H, m), 4. .22 (2H, t, J=6. 8Hz), 3. 04 (2H, t, J=6. 7Hz), 2. 40-2. 15 (2H, m), 2. 15-1. 95 (2H, m), 1. 9
Purity >90% (NMR)		5-1.75(2H, m), 1.75-1.55(1 H, m), 1.55-1.15(3H, m).
MS 533 (M+1)		

Example No.	125	1H NMR(δ) ppm
HO N O		300MHz, DMSO-d6 8. 32 (1H, s), 8. 28 (1H, d, J=8 .7Hz), 8. 05 (1H, d, J=9. 0Hz) , 7. 73 (2H, d, J=9. 0Hz), 7. 43 (4H, d, J=7. 2Hz), 7. 36-7. 20 (8H, m), 4. 74 (2H, d, J=7. 5Hz), 4. 57 (1H, t, J=7. 5Hz), 4. 3 8 (1H, m), 2. 40-2. 15 (2H, m), 2. 15-1. 95 (2H, m), 1. 95-1. 8 5 (2H, m), 1. 85-1. 55 (1H, m),
Purity >90% (NMR)	1.55-1.20(3H, m).
MS 517 (M+1)		

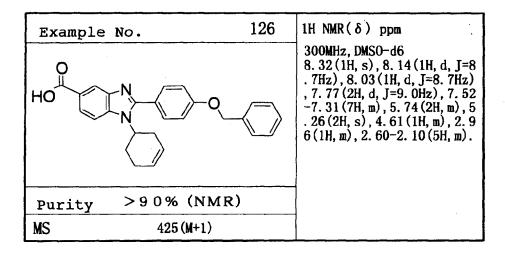


Table 33

Example No. 127	1H NMR(δ) ppm
HO N O F	300MHz, DMSO-d6 13. 2(1H, brs), 8. 33(1H, s), 8. 12(1H, d, J=8. 7Hz), 7. 96(1H, d, J=8. 8Hz), 7. 79(2H, d, J=8. 7Hz), 7. 52-7. 32(7H, m) , 5. 26(2H, s), 4. 92(1H, d, J= 49. 4Hz), 4. 57(1H, m), 2. 65- 2. 35(2H, m), 2. 25-1. 50(6H, m).
Purity >90% (NMR)	
MS 445 (M+1)	

Example No.	128	1H NMR(δ) ppm
HO N O		300MHz, DMSO-d6 8. 21 (1H, s), 7. 92and7. 85 (2 H, ABq, J=8. 6Hz), 7. 61and7. 06 (4H, A'B'q, J=8. 6Hz), 7. 3 6-6. 91 (9H, m), 4. 24 (1H, brt, J=12. 2Hz), 2. 35-2. 15 (2H, m), 1. 95-1. 75 (4H, m), 1. 70- 1. 58 (1H, m), 1. 48-1. 14 (3H, m)
Purity >90% (NMR)		
MS 505 (M+1)		

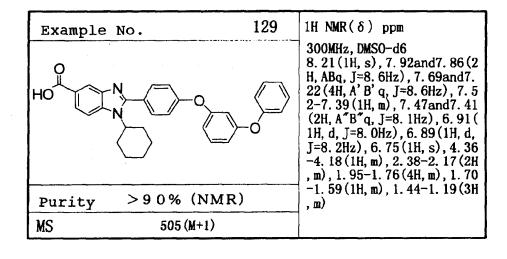


Table 34

Example No.	130	1H NMR(δ) ppm
HO NO		300MHz, DMSO-d6 8. 27 (1H, s), 7. 69 (2H, d, J=8 .6Hz), 7. 49-7. 21 (11H, m), 5 .08and5. 03 (2H, ABq, J=12. 6 Hz), 5. 07-4. 99 (1H, m), 4. 26 (2H, d, J=6. 6Hz), 2. 40-2. 18 (2H, m), 2. 04-1. 77 (4H, m), 1 .70-1. 58 (1H, m), 1. 48-1. 15 (3H, m)
Purity >90%	(NMR)	
MS 590	(M+1)	

Example No. 1	31 1H NMR(δ) ppm
CF ₃ HO N F O	300MHz, DMSO-d6 8. 29 (1H, s), 8. 11 (1H, d, J=9 . 0Hz), 7. 96 (1H, d, J=8. 4Hz) , 7. 80 (2H, d, J=8. 1Hz), 7. 72 -7. 41 (7H, m), 7. 12 (1H, d, J= 12. 6Hz), 7. 01 (1H, d, J=8. 4H z), 5. 12 (2H, s), 4. 06 (1H, m) , 2. 35-2. 10 (2H, m), 2. 00-1. 75 (4H, m), 1. 75-1. 55 (1H, m) , 1. 60-1. 20 (3H, m).
Purity > 90% (NMR)	
MS 589 (M+1)	·

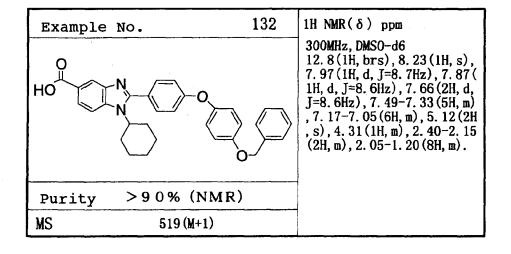


Table 35

Example No. 133	3 1H NMR(δ) ppm
HO N O	300MHz, DMSO-d6 8. 57 (1H, s), 8. 01 (1H, d, J=8 .7Hz), 7. 66 (1H, d, J=8. 7Hz) ,7. 51 (2H, d, J=8. 7Hz), 7. 31 (4H, d, J=8. 0Hz), 7. 16 (4H, d , J=8. 0Hz), 7. 09 (2H, d, J=8. 7Hz), 6. 26 (1H, s), 4. 37 (1H, m), 2. 41-2. 28 (2H, m), 2. 33 (6H, s), 2. 03-1. 84 (4H, m), 1. 77 (1H, m), 1. 45-1. 20 (3H, m)
Purity >90% (NMR)	•
MS 531 (M+1)	

Example No. 134	1H NMR(δ) ppm
HO N O F	8.59(1H, d, J=1.5Hz), 8.02(1H, dd, J=8.7, 1.5Hz), 7.68(1H, d, J=8.7Hz), 7.54(2H, d, J=8.8Hz), 7.39(4H, dd, J=8.7, 5.3Hz), 7.08(4H, d, J=8.7, 5.3Hz), 7.05(2H, d, J=8.8Hz), 6.29(1H, s), 4.36(1H, m), 2.43-2.19(2H, m), 2.04-1.85(4H, m), 1.78(1H, m), 1.45-1.23(3H, m).
Purity >90% (NMR)	
MS 539 (M+1)	

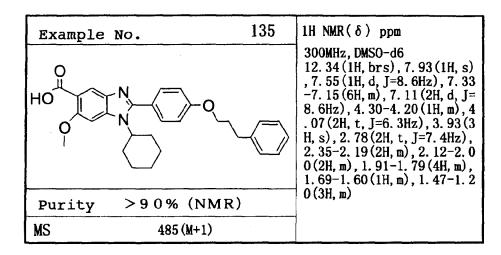


Table 36

Example	No.	136	lH NMR(δ) ppm
НО	N O		300MHz, DMSO-d6 8. 13 (1H, s), 7. 65 (2H, d, J=8 .7Hz), 7. 63 (1H, s), 7. 35-7. 12 (7H, m), 4. 35-4. 20 (1H, m) ,4. 10 (1H, t, J=6. 3Hz), 2. 78 (2H, t, J=7. 5Hz), 2. 33-1. 78 (8H, m), 1. 70-1. 16 (4H, m)
Purity	>90% (NMR)		
MS	471 (M+1)		

Example	No.	137	1H NMR(δ) ppm
HO H ₃ C	N O	-	300MHz, DMSO-d6 8. 24 (1H, s), 8. 11 (1H, s), 7. 76 (2H, d, J=9. 0Hz), 7. 37-7. 16 (7H, m), 4. 43-4. 30 (1H, m), 4. 13 (2H, t, J=6. 3Hz), 2. 84 -2. 68 (5H, m), 2. 42-2. 22 (2H, m), 2. 18-1. 80 (6H, m), 1. 70 -1. 20 (4H, m)
Purity	>90% (NMR)		
MS	469 (M+1)		

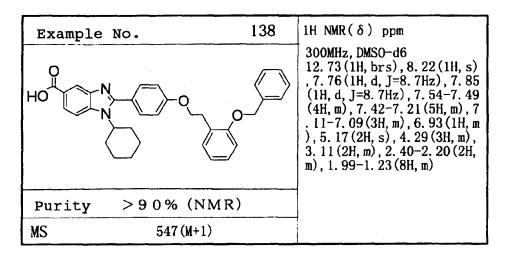


Table 37

Example No.	139	1H NMR(δ) ppm
HO N Q		300MHz, DMSO-d6 12.73(1H, brs), 8.22(1H, s), 7.93(1H, d, J=8.7Hz), 7.73 (1H, m), 7.60-7.57(2H, m), 7.47-6.90(1H, m), 5.11(2H, s), 4.33-4.28(3H, m), 3.09-3.04(2H, t, J=6.7Hz), 2.35-2.20(2H, m), 1.95-1.10(8H, m)
Purity > 90%	(NMR)	
MS 547	(M+1)	

Example No.	140	1H NMR(δ) ppm
HO N O	о }-он	300MHz, DMSO-d6 12.83(2H, brs), 8.22(1H, s), 7.94(1H, d, J=8.7Hz), 7.85 (1H, d, J=8.4Hz), 7.63-7.60 (2H, m), 7.26-7.03(6H, m), 4 .73(2H, s), 4.30(1H, m), 2.4 0-2.15(2H, m), 2.00-1.20(8 H, m)
Purity > 90% (NMR)		
MS 487 (M+1)		

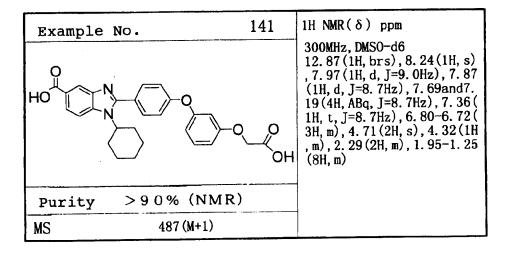


Table 38

Example No.	142	1H NMR(δ) ppm
HO N Q	CI	300MHz, DMSO-d6 8. 32(1H, s), 8. 27(1H, d, J=8 .7Hz), 8. 05(1H, d, J=9. 0Hz) ,7. 76-7. 72(3H, m), 7. 54(1H ,d, J=8. 4Hz), 7. 39-7. 22(7H ,m), 5. 11(1H, s), 4. 36(1H, m), 2. 35(3H, s), 2. 35-2. 15(2 H, m), 2. 15-1. 95(2H, m), 1. 9 5-1. 75(2H, m), 1. 75-1. 55(1 H, m), 1. 55-1. 15(3H, m).
Purity >90% (NMF	۲)	
MS 551 (M+1)		

Example No.	143	1H NMR(δ) ppm
HO N O	CI	300MHz, DMSO-d6 13. 1 (1H, brs), 8. 30 (1H, s), 8. 24 (1H, d, J=8. 8Hz), 8. 03 (1H, d, J=8. 7Hz), 7. 74-7. 71 (3H, m), 7. 52 (1H, d, J=8. 3Hz), 7. 40-7. 36 (3H, m), 7. 23 (2H, d, J=8. 8Hz), 7. 01 (2H, d, J=8. 7Hz), 5. 11 (2H, s), 4. 35 (1H, m), 3. 79 (3H, s), 2. 45-2. 1 5 (2H, m), 2. 15-1. 95 (2H, m),
Purity >90% (NMR)		1.95-1.75(2H, m), 1.75-1.5 5(1H, m), 1.55-1.15(3H, m).
MS 567 (M+1)		

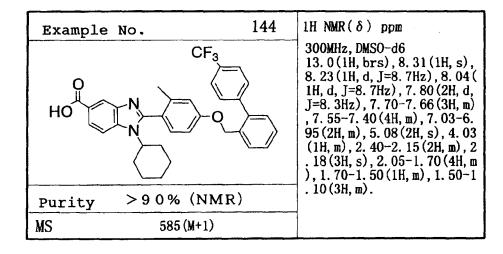
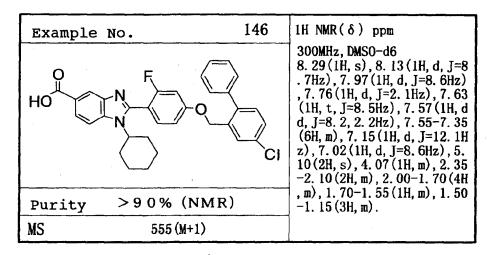


Table 39

Example No. 145	1H NMR(δ) ppm
HO N CI	300MHz, DMSO-d6 8. 31 (1H, s), 8. 23 (1H, d, J=8 . 8Hz), 8. 02 (1H, d, J=8. 7Hz) , 7. 73-7. 71 (3H, m), 7. 54 (1H , d, J=8. 3Hz), 7. 48 (2H, d, J= 8. 4Hz), 7. 41-7. 37 (3H, m), 7 . 22 (2H, d, J=8. 7Hz), 5. 13 (2 H, s), 4. 34 (1H, m), 2. 40-2. 2 0 (2H, m), 2. 15-1. 95 (2H, m), 1. 95-1. 75 (2H, m), 1. 70-1. 5
Purity >90% (NMR)	5(1H, m), 1.50-1.15(3H, m), 1.31(9H, s).
MS 593 (M+1)	



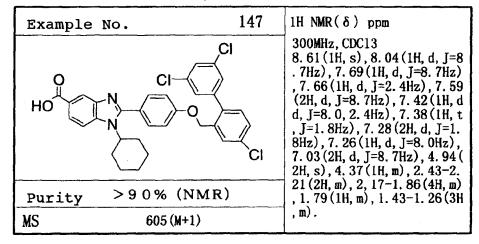
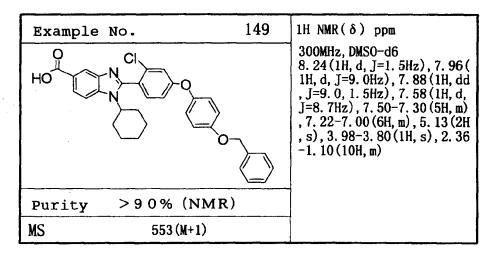


Table 40

Example No. 1	48 1H NMR(δ) ppm
HO N F	300MHz, DMSO-d6 8. 21 (s, 1H), 7. 89 (1H, d, J=8 . 7Hz), 7. 87 (1H, d, J=8. 7Hz), 7. 63-7. 46 (5H, m), 7. 30-7. 12 (5H, m), 7. 08 (1H, d, J=11. 0Hz), 6. 81 (1H, s), 3. 92 (1H, m), 2. 15-2. 06 (2H, m), 1. 89-172 (4H, m), 1. 61 (1H, m), 1. 4 2-1. 09 (3H, m).
Purity > 90% (NMR)	
MS 557 (M+1)	



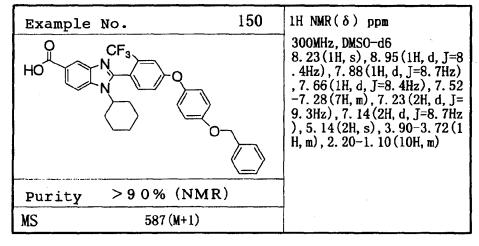


Table 41

Example No.	151	1H NMR(δ) ppm
HO N O	CI	300MHz, DMSO-d6 8. 18(1H, s), 7. 92-7. 78(3H, m), 7. 78-7. 58(3H, m), 7. 58-7. 44(4H, m), 7. 29(1H, d, J=8. 7Hz), 4. 88(1H, d, J=11. 8Hz), 4. 80(1H, d, J=11. 8Hz), 4. 22(1H, m), 2. 37-2. 16(2H, m), 1. 95-1. 75(4H, m), 1. 64(1H, m), 1. 48-1. 14(3H, m).
Purity >90% (NM	(R)	
MS 605 (M+1)		

Example No.	152	1H NMR(δ) ppm
HO N O	NH ₂	300MHz, DMSO-d6 8. 21 (2H, m), 7. 99-7. 80 (2H, m), 7. 63-7. 08 (9H, m), 4. 20- 3. 98 (4H, m), 2. 20-2. 15 (2H, m), 1. 95-1. 74 (4H, m), 1. 70- 1. 54 (1H, m), 1. 44-1. 14 (3H, m)
Purity >90% (NMR)	
MS 456 (M+1)		

Example No.	153	1H NMR(δ) ppm
HO N O		300MHz, DMSO-d6 8. 20(1H, s), 8. 93and7. 83(2 H, ABq, J=8. 7Hz), 7. 86-7. 21 (11H, m), 7. 03(2H, d, J=8. 7H z), 4. 20(1H, brt, J=12. 2Hz) , 2. 32-2. 13(2H, m), 1. 92-1. 74(4H, m), 1. 69-1. 58(1H, m) 1. 45-1. 15(3H, m)
Purity >90% (NMF	₹)	
MS 489 (M+1)		

Table 42

Example No.	154	1H NMR(δ) ppm
HO N		300MHz, DMSO-d6 8. 23(1H, s), 7. 94and7. 86(2 H, ABq, J=8. 6Hz), 7. 72-7. 16 (13H, m), 5. 25(2H, brs), 4. 5 5(2H, d, J=6. 6Hz), 4. 31(1H, brt, J=12. 2Hz), 2. 37-2. 18(2H, m), 1. 98-1. 77(4H, m), 1. 70-1. 58(1H, m), 1. 48-1. 20(3H, m)
Purity >90%	(NMR)	
MS 489	(M+1)	

Example No. 155	1H NMR(δ) ppm
HO N O O N O O	300MHz, DMSO-d6 8. 21 (1H, s), 7. 85and7. 61 (2 H, ABq, J=8. 7Hz), 7. 61and6. 99 (4H, A'B'q, J=8. 7Hz), 7. 2 8-7. 18 (1H, m), 7. 25 (2H, d, J =7. 5Hz), 7. 07-6. 99 (1Hm), 4 . 30 (1H, brt, J=12. 2Hz), 3. 8 3 (2H, d, J=6. 0Hz), 3. 82-3. 7 2 (1H, m), 2. 68-2. 49 (2H, m), 2. 39-2. 21 (2H, m), 1. 95-1. 8
Purity >90% (NMR)	0(4H, m), 1.79-1.60(2H, m), 1.46-1.22(5H, m), 1.30(9H,
MS 626 (M+1)	s), 1.00-0.82(2H, m)

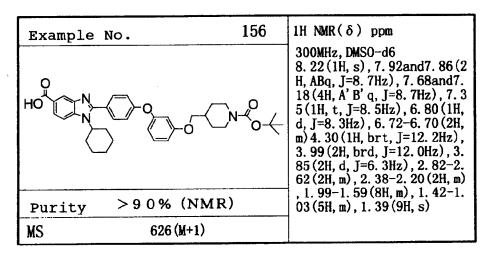


Table 43

Example No.	157	1H NMR(δ) ppm
HO N O	O-CH ₃	300MHz, DMSO-d6 12. 78 (1H, brs), 8. 22 (1H, s), 7. 96 (1H, d, J=8. 6Hz), 7. 86 (1H, d, J=8. 6Hz), 7. 75 (1H, d, J=2. 2Hz), 7. 60 (2H, d, J=8. 4Hz), 7. 55 (1H, dd, J=8. 3Hz), 7. 48 (1H, d, J=8. 3Hz), 7. 18 (2H, d, J=8. 4Hz), 6. 73 (2H, s), 5. 08 (2H, s), 4. 23 (1H, m), 3. 68 (9H, s), 2. 37-2. 17
Purity >90% (NMR)	(2H, m), 1.99-1.79(4H, m), 1 .65(1H, s), 1.49-1.15(3H, m
MS 627 (M+1)).

Example No.	158	1H NMR(δ) ppm
HO N O		300MHz, DMSO-d6 12. 75 (1H, brs), 8. 22 (1H, s), 7. 93 (2H, d, J=8. 7Hz), 7. 85 (2H, d, J=8. 5Hz), 7. 53-7. 21 (10H, m), 6. 94 (2H, d, J=8. 7Hz), 4. 30-4. 12 (3H, m), 3. 05 (2H, m), 2. 35-2. 15 (2H, m), 1. 95-1. 75 (4H, m), 1. 75-1. 55 (1H, m), 1. 50-1. 10 (3H, m)
Purity > 90% (NM	R)	·
MS 517 (M+1)		

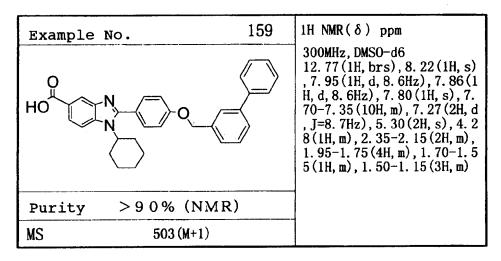


Table 44

Example No.	160	1H NMR(δ) ppm
HO N	HCI H	300MHz, DMSO-d6 8. 90 (1H, brs), 8. 59 (1h, brs), 8. 33 (1H, s), 8. 18and8. 00 (2H, ABq, J=8. 5Hz), 7. 73and 7. 10 (4H, A'B'q, J=8. 5Hz), 7 . 32-7. 05 (4H, m), 4. 35 (1H, b rt, J=12. 2Hz), 3. 86 (2H, d, J =6. 3Hz), 3. 25-3. 08 (2H, m), 2. 85-2. 66 (2H, m), 2. 40-2. 2 8 (2H, m), 2. 07-1. 14 (15H, m)
Purity >90%	(NMR)	
MS 526 ((M+1)	

Example No.	161	1H NMR(δ) ppm
HO N O	HCI	300MHz, DMSO-d6 9. 05 (1H, brs), 8. 76 (1h, brs), 8. 31 (1H, s), 8. 19and8. 00 (2H, ABq, J=8. 3Hz), 7. 79and 7. 25 (4H, A'B'q, J=8. 3Hz), 7 . 39 (1H, brs), 6. 86-6. 74 (4H, m), 4. 37 (1H, brt, J=12. 2Hz), 3. 89 (2H, d, J=5. 0Hz), 3. 3 5-3. 18 (2H, m), 2. 98-2. 75 (2H, m), 2. 38-2. 17 (2H, m), 2. 1
Purity >90% (NMR)	6-1. 15 (15H, m)
MS 526 (M+1)		

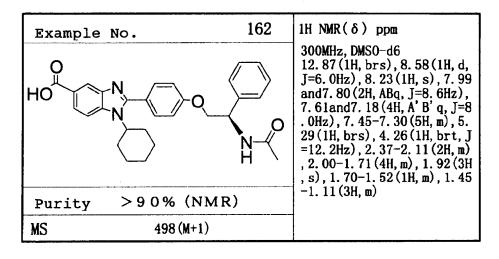


Table 45

Example No.	163	1H NMR(δ) ppm
HO N N N N N N N N N N N N N N N N N N N		300MHz, DMSO-d6 8. 23 (1H, s), 7. 95and7. 86 (2 H, ABq, J=8. 6Hz), 7. 69and7. 18 (4H, A'B'q, J=8. 6Hz), 7. 3 5 (1H, t, J=8. 6Hz), 6. 80 (1H, d, J=7. 5Hz), 6. 72-6. 69 (2H, m), 5. 20 (1H, t, J=3. 7Hz), 4. 31 (1H, brt, J=12. 2Hz), 3. 95 (2H, t, J=6. 8Hz), 2. 49-2. 19 (4H, m), 1. 97-1. 76 (4H, m), 1
Purity > 90% (NMR)		.68(3H, s), 1.67-1.54(1H, m), 1.61(3H, s), 1.45-1.20(3
MS 511 (M+1)		Н, ш)

Example No. 164	1H NMR(δ) ppm
HO N O O	300MHz, DMSO-d6 8. 20 (1H, s), 7. 87 (2H, s), 7. 68and7. 18 (4H, ABq, J=8. 7Hz), 7. 35 (1H, t, J=7. 9Hz), 6. 8 1 (1H, d, J=9. 4Hz), 6. 72 (1Hs), 6. 71 (1H, d, J=6. 8Hz), 4. 8 0 (2H, s), 4. 29 (1H, brt, J=12 . 2Hz), 4. 10 (1H, t, J=6. 7Hz), 2. 43 (1H, t, J=6. 7Hz), 2. 39 -2. 19 (2H, m), 1. 97-1. 78 (4H
Purity >90% (NMR)	, m), 1.76(3H, s), 1.70-1.56 (1H, m), 1.43-1.19(3H, m)
MS 497 (M+1)	

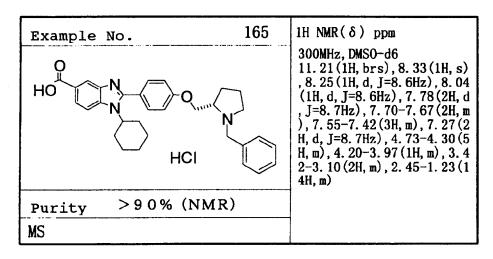


Table 46

Example No.	166	1H NMR(
HO N	S CI	300MHz, I 8. 27 (1H, . 4Hz), 7, , 7. 73 (1I (2H, d, J- d, J-8. 4, (5H, m), 7), 5. 10 (2 2. 50 (3H, m), 2. 10-
Purity >90% (N	MR)	1.55(1H, m).
MS 583 (M+1))	

δ) ppm

DMSO-d6 , s), 8. 13(1H, d, J=8 . 97 (1H, d, J=9. 0Hz) H, d, J=1.8Hz), 7.68 =8. 4Hz), 7. 54 (1H, d , 2. 1Hz), 7. 41-7. 31 7. 19 (2H, d, J=8. 4Hz 2H, s), 4. 32 (1H, m), , s), 2.40-2.15(2H, –1. 75 (4H, m), 1. 75– , m), 1.55-1.10(3H,

Example	No.	167
НО		CI
Purity	>90% (NMF	₹)
MS	615 (M+1)	

1H NMR(δ) ppm

300MHz, DMSO-d6 8.25(1H, s), 8.09(1H, d, J=8).4Hz), 8. 00 (2H, d, J=8.4Hz) 7. 94 (1H, d, J=8. 7Hz), 7. 80 (1H, d, J=2. 1Hz), 7. 73 (2H, d , J=8. 1Hz), 7. 65 (2H, d, J=8. 7Hz), 7. 60(1H, dd, J=8.1, 2.1Hz), 7. 44(1H, d, J=8. 1Hz), 7. 16 (2H, d, J=8. 7Hz), 5. 13 (2H, s), 4. 30 (1H, m), 3. 26 (3H , s), 2.40-1.15(2H, m), 2.05 -1.75(4H, m), 1.75-1.55(1H), m), 1.55-1.15(3H, m).

Example	No.	168
НО		CI
Purity	>90% (NMR)	
MS	543 (M+1)	

1H NMR(δ) ppm

300MHz, DMSO-d6 13.1(1H, brs), 8.32(1H, s), 8. 28 (1H, d, J=8. 8Hz), 8. 05 (1H, d, J=8.7Hz), 7.80-7.75(3H, m), 7.69(1H, d, J=4.1Hz), 7. 57 (2H, m), 7. 34-7. 29 (3H , m), 7. 20-7. 15 (1H, m), 5. 24 (2H, s), 4.39(1H, m), 2.45-2. 20 (2H, m), 2. 20-1. 95 (2H, m), 1.95-1.75(2H, m), 1.75-1. 55 (1H, m), 1. 55-1. 15 (3H, m

Table 47

Example No.	169	1H NMR(δ) ppm
HO NO	CI	300MHz, DMSO-d6 8. 31 (1H, s), 8. 26 (1H, d, J=8 .7Hz), 8. 05 (1H, d, J=8. 7Hz) ,7. 78-7. 71 (3H, m), 7. 59-7. 41 (6H, m), 7. 23 (2H, d, J=9. 0 Hz), 5. 11 (2H, s), 4. 35 (1H, m), 2. 40-2. 15 (2H, m), 2. 15-1 .95 (2H, m), 1. 95-1. 75 (2H, m), 1. 75-1. 55 (1H, m), 1. 55-1 .15 (3H, m).
Purity >90% (NMR)		
MS 571 (M+1)		

Example No. 170	1H NMR(δ) ppm
O N O CI	300MHz, DMSO-d6 12. 7 (1H, brs), 8. 66 (1H, s), 8. 61 (1H, m), 8. 21 (1H, s), 7. 92-7. 79 (4H, m), 7. 61-7. 56 (3H, m), 7. 50-7. 43 (2H, m), 7. 10 (2H, d, J=8. 7Hz), 5. 09 (2H ,s), 4. 26 (1H, m), 2. 40-2. 15 (2H, m), 2. 00-1. 75 (4H, m), 1 .75-1. 55 (1H, m), 1. 50-1. 15 (3H, m).
Purity >90% (NMR)	
MS 538 (M+1)	

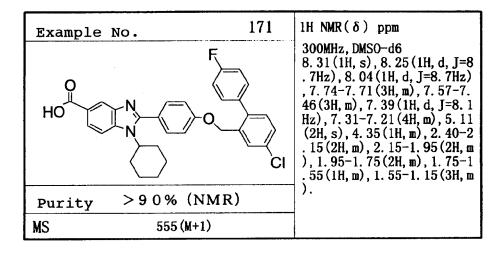


Table 48

Example No.	172	1H NMR(δ) ppm
HO N	-o -o -o	300MHz, DMSO-d6 8. 24(1H, s), 7. 99(1H, d, J=8 . 7Hz), 7. 88(1H, d, J=10. 5Hz), 7. 70(1H, dd, J=11. 4, 1. 8H z), 7. 48-7. 32(6H, m), 7. 17- 7. 09(5H, m), 5. 12(2H, s), 4. 30(1H, m), 2. 40-2. 15(2H, m) , 2. 05-1. 75(4H, m), 1. 75-1. 55(1H, m), 1. 55-1. 20(3H, m)
Purity > 90%	(NMR)	
MS 537	(M+1)	

Example No. 173	1H NMR(δ) ppm
HO N Br	300MHz, DMSO-d6 8. 33 (1H, s), 8. 29 (1H, d, J=8 .7Hz), 8. 06 (1H, d, J=8. 7Hz) ,7. 82-7. 74 (4H, m), 7. 45 (1H ,dd, J=8. 4, 3. 0Hz), 7. 39 (2H ,d, J=8. 7Hz), 5. 28 (2H, s), 4 .40 (1H, m), 2. 40-2. 15 (2H, m), 2. 15-1. 95 (2H, m), 1. 95-1 .75 (2H, m), 1. 75-1. 55 (1H, m), 1. 55-1. 15 (3H, m).
Purity >90% (NMR)	
MS 540 (M+1)	

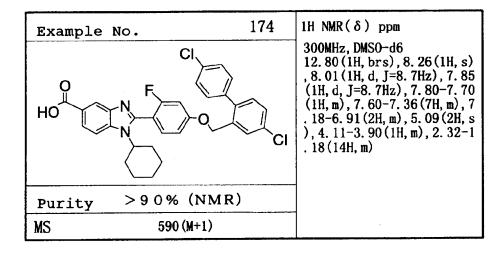


Table 49

Example No.	175	1H NMR(δ) ppm
HO N O O) N O	300MHz, DMSO-d6 12. 75 (1H, s), 8. 21 (1H, s), 7. 94and7. 85 (2H, ABq, J=8. 7Hz), 7. 61and7. 00 (4H, A' B' q, J=8. 5Hz), 7. 31-6. 91 (2H, m), 7. 25 (2H, d, J=7. 7Hz), 5. 41 (2H, brs), 4. 54 (2H, d, J=6.64 Hz), 4. 35-4. 14 (2H, m), 2. 49 -2. 15 (3H, m), 1. 95-1. 55 (5H, m), 1. 50-1. 13 (5H, m), 1. 10
Purity >90% (NMR))	-0.77(2H, m)
MS 568 (M+1)		

Example No. 17	6 1H NMR(δ) ppm
HO N	300MHz, DMSO-d6 8. 24 (1H, s), 7. 97and7. 87 (2 H, ABq, J=8. 6Hz), 7. 69and7. 19 (4H, A'B' q, J=8. 6Hz), 7. 3 5 (1H, t, J=8. 1Hz), 6. 81 (1H, d, J=9. 2Hz), 6. 72 (1H, s), 6. 71 (1H, d, J=6. 5Hz), 4. 48-4. 20 (2H, m), 3. 95-3. 75 (3H, m), 3. 03 (1H, t, J=12. 3Hz), 2. 6 0-2. 40 (1H, m), 2. 39-2. 15 (2
Purity > 90% (NMR)	H, m), 2. 07-1. 58 (6H, m), 1. 9 9 (3H, s), 1. 50-1. 00 (5H, m)
MS 568 (M+1)	

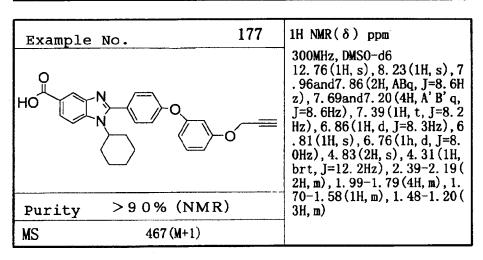


Table 50

Example No.	178	1H NMR(δ) ppm
HO NO O	-⟨	300MHz, DMSO-d6 12.85(1H, s), 8.75(1H, s), 8 .63(2H, d, J=3.8Hz), 8.25(1 H, s), 8.04-8.01(2H, m), 8.0 2and7.90(2H, ABq, J=8.6Hz) ,7.72and7.20(4H, A'B'q, J= 8.6Hz), 7.57(2H, dd, J=7.8, 5.0Hz), 7.40(1H, t, J=8.2Hz), 6.93(1H, d, J=8.2Hz), 6.8 7(1H, s), 6.77(1H, d, J=8.2H
Purity >90% (NMR)		z), 5. 23 (2H, s), 4. 33 (1H, br t, J=12. 2Hz), 2. 40-2. 18 (2H
MS 520 (M+1)		, m), 2.00-1.55(5H, m), 1.50 -1 15(3H m)

Example No.	179	1H NMR(δ) ppm
HO N O		300MHz, DMSO-d6 8. 32 (1H, s), 8. 29 (1H, d, J=9 . 0Hz), 8. 06 (1H, d, J=8. 7Hz) , 7. 61 (1H, d, J=8. 4Hz), 7. 58 -7. 32 (5H, m), 6. 98 (1H, d, J= 2. 1Hz), 6. 93 (1H, dd, J=8. 7, 2. 1Hz), 5. 27 (2H, s), 4. 16-4 . 00 (1H, m), 3. 87 (3H, s), 2. 2 0-2. 12 (2H, m), 2. 02-1. 98 (4 H, m), 1. 70-1. 60 (1H, m), 1. 5
Purity >90% (NMR)	2-1. 10 (3H, m)
MS 457 (M+1)		

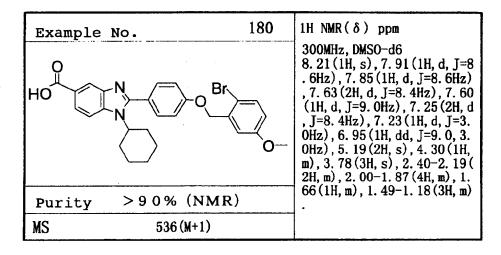


Table 51

Example No.	181	1H NMR(δ) ppm
HO N O	10	300MHz, DMSO-d6 8. 19(1H, s), 7. 95(1H, d, J=8 .7Hz), 7. 86(1H, d, J=8. 7Hz) , 7. 65(4H, d, J=7. 4Hz), 7. 47 (2H, d, J=8. 7Hz), 7. 44-7. 27 (6H, m), 6. 99(2H, d, J=8. 7Hz) , 4. 20(1H, m), 2. 34-2. 12(2 H, m), 1. 98-1. 75(4H, m), 1. 6 4(1H, m), 1. 46-1. 13(3H, m).
Purity >90% (NMR	.)	
MS 547 (M+1)		

Example No.	182	1H NMR(δ) ppm
CI N CI	NO ₂	300MHz, DMSO-d6 8.55(1H, d, J=2.1Hz), 8.32(1H, m), 8.21(1H, s), 7.95(1H, d, J=8.4Hz), 7.86(1H, d, J=7.8Hz), 7.68-7.56(7H, m), 7.14(2H, d, J=8.7Hz), 5.21(1H, s), 4.26(1H, m), 2.35-2.15(2H, m), 2.00-1.75(4H, m), 1.74-1.55(1H, m), 1.50-1.15(3H, m)
Purity > 90% (NMR)		
MS 582 (M+)		

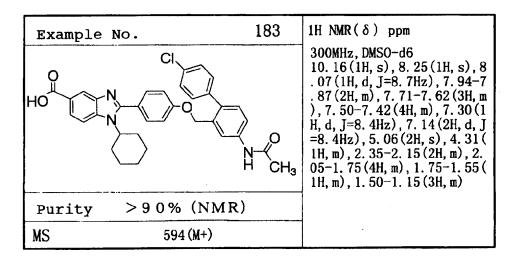


Table 52

Example No. 18	34 1H NMR(δ) ppm
O OH OO OH	300MHz, DMSO-d6 13. 2(2H, brs), 8. 30(1H, s), 8. 26(1H, d, J=8. 8Hz), 8. 04(1H, d, J=8. 8Hz), 8. 00(2H, d, J=8. 2Hz), 7. 79(1H, s), 7. 73 (2H, d, J=8. 7Hz), 7. 61-7. 56 (3H, m), 7. 44(1H, d, J=8. 3Hz), 7. 23(2H, d, J=8. 8Hz), 5. 1 3(2H, s), 4. 35(1H, m), 2. 45- 2. 15(2H, m), 2. 15-1. 95(2H,
Purity > 90% (NMR)	m), 1.95-1.75(1H, m), 1.75- 1.15(3H, m).
MS 581 (M+1)	

Example No.	185	1H NMR(δ) ppm
HO N C	0 0 0 \	300MHz, DMSO-d6 8. 30 (1H, m), 8. 24 (1H, d, J=9 .0Hz), 8. 03 (1H, d, J=9. 0Hz) , 7. 79-7. 10 (9H, m), 5. 20-5. 07 (2H, m), 4. 43-4. 04 (4H, m) , 3. 50-3. 36 (2H, m), 2. 40-1. 19 (14H, m)
Purity > 90%	(NMR)	
MS 554	(M+1)	

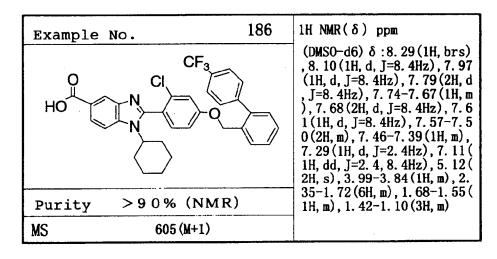
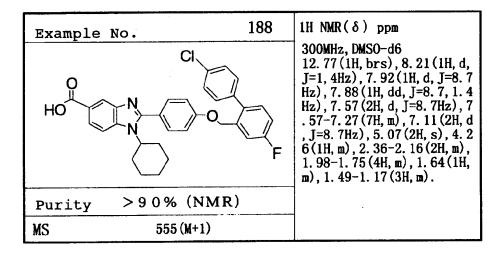


Table 53

Example No.	187	1H NMR(δ) ppm
HO N O		300MHz, DMSO-d6 12. 76(1H, s), 8. 57(1H, d, J= 4. 4Hz), 8. 23(1H, s), 7. 96an d7. 86(2H, ABq, J=8. 2Hz), 7. 87-7. 82(1H, m), 7. 68and7. 1 2(4H, A'B'q, J=8. 6Hz), 7. 53 (2H, d, J=7. 8Hz), 7. 37(1H, t , J=8. 3Hz), 7. 36-7. 33(1H, m), 6. 90(1H, d, J=8. 3Hz), 6. 8 3(1H, s), 6. 74(1H, d, J=8. 0H
Purity >90% (NMR)	<u>.</u>	z), 5. 20 (2H, s), 4. 31 (1H, br t, J=12. 2Hz), 2. 35-2. 19 (2H
MS 520 (M+1)		, m), 1.99-1.57 (5H, m), 1.45 -1 วก(วม m)



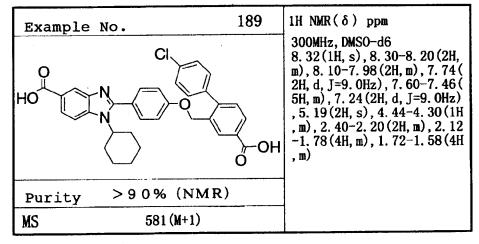


Table 54

Example No.	190	1H NMR(δ) ppm
HO N O	NH ₂	300MHz, DMSO-d6 8. 36-7. 90 (5H, m), 7. 74 (2H, d, J=8. 6Hz), 7. 60-7. 40 (5H, m), 7. 25 (2H, d, J=8. 7Hz), 5. 14 (2H, s), 4. 45-4. 28 (1H, m), 2. 40-2. 15 (4H, m), 1. 75-1. 55 (1H, m), 1. 55-1. 20 (3H, m)
Purity > 90% (NM	R)	
MS 580 (M+1)		

Example No.	191	1H NMR(δ) ppm
HO N O	CH₃ CH₃	300MHz, DMSO-d6 8. 22 (1H, s), 7. 94 (1H, d, J=8 . 4Hz), 7. 85 (1H, d, J=8. 7Hz), 7. 61 (2H, d, J=8. 7Hz), 7. 25 -7. 00 (6H, m), 4. 86 (2H, s), 4 . 30 (1H, m), 2. 89 (3H, s), 2. 8 0 (3H, s), 2. 29 (2H, m), 2. 00- 1. 75 (4H, m), 1. 70-1. 55 (1H, m), 1. 50-1. 15 (3H, m)
Purity >90% (NMR)) 	
MS 514 (M+1)		

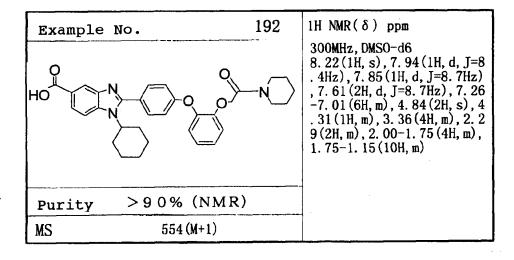


Table 55

Example No.	193	1H NMR(δ) ppm
HO N	-O, N, N, O = S = O	300MHz, DMSO-d6 13.00(1H, brs), 8.29(1H, d, J=1.4Hz), 8.15(1H, d, J=8.8 Hz), 7.97(1H, dd, J=1.4Hz, 8.8Hz), 7.89(2H, d, J=8.8Hz), 7.80-7.60(5H, m) 7.25(2H, d, J=8.8Hz), 4.47-3.90(4H, m), 3.20-3.10(2H, m), 2.41-1.22(14H, m)
Purity >90% (N	MR)	
MS 560 (M+1)	

Example No.	194	1H NMR(δ) ppm
HO NO	0 N	300MHz, DMSO-d6 12.80(1H, brs), 8.23(1H, s), 7.97(1H, d, J=8.5Hz), 7.87 (1H, d, J=8.5Hz), 7.70-7.17 (9H, m), 4.60-4.13(4H, m), 3.72-3.40(2H, m), 2.40-1.15 (14H, m)
Purity > 90% (NM	R)	·
MS 524 (M+1)		

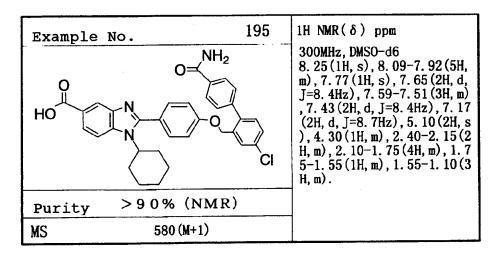


Table 56

Example No. 196	1H NMR(δ) ppm
HO H ₃ C, N-CH ₃	300MHz, DMSO-d6 8. 22 (1H, s), 7. 95 (1H, d, J=8 . 4Hz), 7. 86 (1H, d, J=8. 4Hz) , 7. 69and7. 18 (4H, ABq, J=8. 7Hz), 7. 34 (1H, t, J=8. 0Hz), 6. 80-6. 69 (3H, m), 4. 83 (2H, s), 4. 31 (1H, m), 2. 98 (3H, s) , 2. 84 (3H, s), 2. 29 (2H, m), 2 . 00-1. 75 (4H, m), 1. 70-1. 55 (1H, m), 1. 50-1. 15 (3H, m)
Purity > 90% (NMR)	·
MS 514 (M+1)	

Example No.	197	1H NMR(δ) ppm
HO N O		300MHz, DMSO-d6 8. 23 (1H, s), 7. 95 (1H, d, J=8 . 4Hz), 7. 86 (1H, d, J=8. 7Hz) , 7. 69and7. 18 (4H, ABq, J=8. 7Hz), 7. 35 (1H, t, J=8. 4Hz), 6. 80-6. 70 (3H, m), 4. 82 (2H, s), 4. 31 (1H, m), 3. 40 (4H, m) , 2. 29 (2H, m), 2. 00-1. 75 (4H , m), 1. 70-1. 15 (10H, m)
Purity > 90% (NMR)		
MS 554 (M+1)		

Example N	io .	198	1H NMR(δ) ppm
HO N		O -S-CH₃ O	300MHz, DMSO-d6 12. 75 (1H, s), 8. 23 (1H, d, J= 4. 4Hz), 7. 95and7. 86 (2H, AB q, J=8. 6Hz), 7. 69and7. 19 (4 H, A'B'q, J=8. 6Hz), 7. 36 (1H , t, J=7. 8Hz), 6. 82 (1H, d, J= 9. 3Hz), 6. 73 (1H, s), 6. 71 (1 H, d, J=7. 2Hz), 4. 30 (1H, brt , J=12. 2Hz), 3. 89 (2H, d, J=6 . 0Hz), 3. 59 (2H, d, J=11. 7Hz
Purity	>90% (NMR)), 2. 85 (3H, s), 2. 73 (2H, t, J =10. 5Hz), 2. 41-2. 20 (2H, m)
MS	604 (M+1)		, 1.98-1.59(8H,m), 1.46-1. าณ/รม m)

Table 57

Example No.	199	1H NMR(δ) ppm
HO N		300MHz, DMSO-d6 8. 33 (1H, s), 8. 30 (1H, d, J=8 . 9Hz), 8. 06 (1H, d, J=8. 7Hz) , 7. 79 (2H, d, J=8. 7Hz), 7. 70 (2H, d, J=8. 7Hz), 7. 61 (2H, d , J=8. 7Hz), 7. 39 (2H, d, J=8. 8Hz), 5. 28 (2H, s), 4. 39 (1H, m), 2. 50-2. 15 (2H, m), 2. 15- 1. 95 (2H, m), 1. 95-1. 75 (2H, m), 1. 75-1. 55 (1H, m), 1. 55-
Purity >90%	(NMR)	1.15(3H, m).
MS 542 (M +1)	

Example No.	200	1H NMR(δ) ppm
HO N O	CI	(DMSO-d6) &:8.23(1H, s), .96(1H, d, J=8.6Hz), 7.86(H, d, J=8.6Hz), 7.69(2H, d, =8.4Hz), 7.52(1H, s), 7.50(7.30(4H, m), 7.18(2H, d, J=.4Hz), 6.90(1H, d, J=8.3Hz), 6.84(1H, s), 6.74(1H, d, J=8.3Hz), 5.15(2H, s), 4.39-21(1H, m), 2.39-2.18(2H, l), 1.99-1.80(4H, m), 1.71-1.50(4H, l)
Purity > 90% (NMR)	-	.59(1H, m), 1.50-1.20(3H, m)
MS 553 (M+1)		

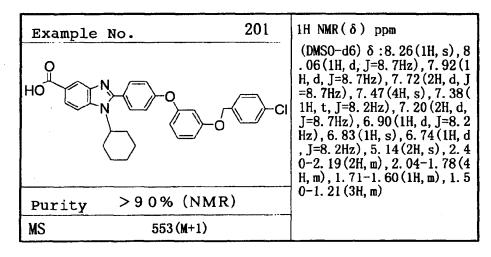


Table 58

Example No. 202	1H NMR(δ) ppm
HO NO OFF	(DMSO-d6) δ :12.81(1H, brs), 8.24(1H, s), 7.99(1H, d, J=8.7Hz), 7.87(1H, d, J=8.7Hz), 7.69(2H, d, J=8.6Hz), 7.53-7.47(2H, m), 7.38(1H, t, J=8.2Hz), 7.26-7.16(4H, m), 6.89(1H, d, J=8.2Hz), 6.82(1H, s), 6.73(1H, d, J=8.2Hz), 5.11(2H, s), 4.40-4.21(1H, m), 2.40-2.17(2H, m), 2.0
Purity >90% (NMR)	1-1.77(4H, m), 1.71-1.59(1 H, m), 1.50-1.20(3H, m)
MS 537 (M+1)	

Example No. 20	
HO NO	300MHz, DMSO-d6 12. 74(1H, brs), 8. 21(1H, s) , 8. 08(2H, d, J=9. 0Hz), 7. 93 (1H, d, J=8. 7Hz), 7. 85(2h, d , J=8. 7Hz), 7. 58(2H, d, J=8. 7Hz), 7. 13(2H, d, J=8. 7Hz), 6. 83(2H, d, J=9. 0Hz), 4. 50- 4. 08(4H, m), 3. 68-3. 30(2H, m), 2. 40-1. 23(14H, m)
Purity >90% (NMR)	
MS 541 (M+1)	

Example No.	204	1H NMR(δ) ppm
HCI		300MHz, DMSO-d6 8. 39-8. 28 (2H, m), 8. 08 (1H, d, J=8. 8Hz), 7. 76 (2H, d, J=8. 7Hz), 7. 29 (2H, d, J=8. 7Hz), 7. 25-7. 13 (2H. m), 6. 80-6. 60 (3H, m), 4. 46-3. 98 (4H, m), 3. 51-3. 42 (1H, m), 3. 20-3. 04 (1H, m), 2. 39-1. 20 (14H, m)
Purity >90% (NMF	₹)	
MS		

Table 59

Example No.	205	1H NMR(δ) ppm
HO	→O,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	300MHz, DMSO-d6 9. 59 (1H, brs), 8. 23 (1H, s), 8. 04 (1H, d, J=8. 4Hz), 7. 90 (1H, d, J=8. 4Hz), 7. 62 (2H, d, J=8. 7Hz), 7. 39 (2H, 2H, d, J= 8. 7Hz) 7. 18 (2H, d, J=8. 7Hz), 6. 63 (2H, d, J=8. 7Hz), 3. 95 -3. 37 (4H, m), 3. 51-3. 40 (1H, m), 3. 17-3. 02 (1H. m), 2. 39 -1. 18 (17H, m)
Purity > 90%	(NMR)	
MS 553	(M+1)	

Example No.	206	1H NMR(δ) ppm
HO	CI S N	300MHz, DMSO-d6 13. 1 (1H, brs), 8. 33 (1H, s), 8. 29 (1H, d, J=8. 8Hz), 8. 06 (1H, d, J=8. 7Hz), 7. 77 (2H, d, J=8. 7Hz), 7. 59-7. 52 (4H, m), 7. 35 (2H, d, J=8. 8Hz), 5. 19 (2H, s), 4. 39 (1H, m), 2. 71 (3H, s), 2. 45-2. 20 (2H, m), 2. 2 (0-1. 95 (2H, m), 1. 95-1. 75 (2H, m), 1. 75-1. 55 (1H, m), 1. 5
Purity >9	0% (NMR)	5-1.15(3H, m).
MS	558 (M+1)	

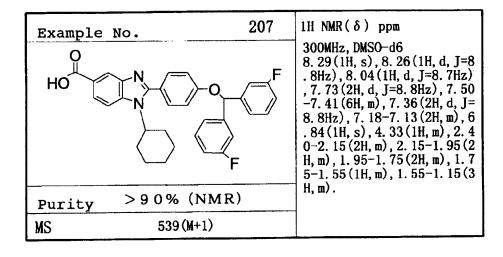


Table 60

Example No.	208	1H NMR(δ) ppm
HO N	NO ₂	300MHz, DMSO-d6 8. 32 (1H, s), 8. 27 (1H, d, J=9 .0Hz), 8. 07-8. 00 (3H, m), 7. 79-7. 70 (3H, m), 7. 51 (2H, d, J=8. 1Hz), 7. 40 (2H, d, J=8. 4 Hz), 7. 18 (2H, d, J=8. 7Hz), 4 .99 (2H, s), 4. 34 (1H, m), 2. 4 0-2. 15 (2H, m), 2. 15-1. 95 (2 H, m), 1. 95-1. 75 (2H, m), 1. 7 5-1. 55 (1H, m), 1. 55-1. 15 (3
Purity > 9 0 % (N	MR)	H, m).
MS 582 (M+1)	

Example No. 209	1H NMR(δ) ppm
HO N O	300MHz, DMSO-d6 8. 24 (1H, d, J=4. 4Hz), 7. 98a nd7. 88 (2H, ABq, J=8. 6Hz), 7 . 70and7. 19 (4H, A'B'q, J=8. 4Hz), 7. 35 (1H, t, J=8. 4Hz), 6. 86 (1H, d, J=8. 1Hz), 6. 79 (1H, s), 6. 71 (1H, d, J=8. 1Hz) , 4. 65-4. 53 (1H, m), 4. 31 (1H , brt, J=12. 2Hz), 3. 88-3. 78 (2H, m), 3. 48 (2H, t, J=9. 0Hz
Purity >90% (NMR)), 2. 39-2. 19 (2H, m), 1. 02-1 .71 (6H, m), 1. 70-1. 50 (3H, m
MS 513 (M+1)), 1. 46-1. 19 (3H, m)

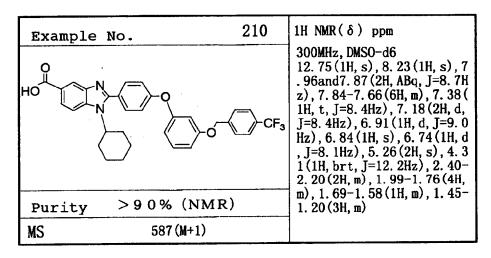


Table 61

Example No.	211	1H NMR(δ) ppm
HO NO	N- HCI	300MHz, DMSO-d6 8. 29 (1H, s), 8. 15and7. 47 (2 H, ABq, J=9. 0Hz), 7. 77and7. 24 (4H, ABq, J=8. 9Hz), 7. 39 (1H, t, J=7. 8Hz), 6. 84 (1H, d, J=9. 3Hz), 6. 76 (1H, s), 6. 75 (1H, d, J=9. 5Hz), 4. 36 (1H, b rt, J=12. 2Hz), 3. 89 (2H, d, J =6. 0Hz), 3. 42 (2H, d, J=10. 8 Hz), 3. 04-2. 88 (2H, m), 2. 78
Purity > 90% (NMR)		-2. 60 (1H, m), 2. 71 (2H, d, J= 4. 8Hz), 2. 38-2. 20 (2H, m), 2
MS 540 (M+1)		.07-1.80(7H, m), 1.70-1.20 (5н m)

Example No.	212	1H NMR(δ) ppm
HO NO	<u></u>	300MHz, DMSO-d6 8. 22 (1H, s), 7. 93and7. 87 (2 H, ABq, J=8. 6Hz), 7. 68and7. 17 (4H, A'B'q, J=8. 7Hz), 7. 4 3-7. 33 (5H, m), 6. 87 (1H, d, J =8. 1Hz), 7. 18 (2H, d, J=8. 4H z), 6. 91 (1H, d, J=9. 0Hz), 6. 81 (1H, s), 6. 72 (1H, d, J=8. 0 Hz), 5. 08 (2H, s), 4. 36 (1H, b rt, J=12. 2Hz), 2. 37-2. 20 (2
Purity >90% (NMR)		H, m), 1.98-1.78(4H, m), 1.6 9-1.60(1H, m), 1.41-1.21(3
MS 575 (M+1)		H, m), 1. 28 (9H, s)

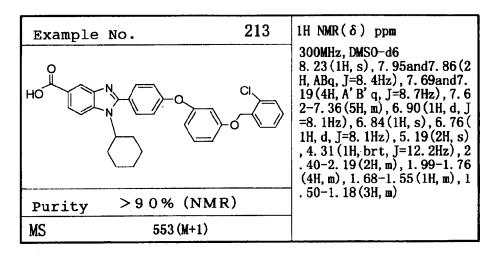


Table 62

Example No. 214	1H
HO NO ON	300 8. 1H 1H , J J= 7, Hz, (11) (2)
Purity >90% (NMR)), H, 1
MS 490 (M+1)	5(

$H NMR(\delta) ppm$

300MHz, DMSO-d6 8. 94 (1H, d, J=2. 1Hz), 8. 60 (1H, dd, J=4. 8, 1. 5Hz), 8. 23 (1H, d, J=1. 5Hz), 8. 12 (1H, dt, J=8. 1, 2. 1Hz), 7. 93 (1H, d, J=8. 7Hz), 7. 87 (1H, dd, J=8. 7, 1. 5Hz), 7. 70 (1H, d, J=8. 7Hz), 7. 67-7. 54 (3H, m), 7. 50 (1H, dd, J=8. 1, 4. 8Hz), 7. 25 (2H, d, J=8. 7Hz), 7. 21 (1H, m), 4. 31 (1H, m), 2. 38-2. 19 (2H, m), 2. 00-1. 78 (4H, m), 1. 65 (1H, m), 1. 48-1. 22 (3H, m).

Example	No. 215
НО	N - O - CI
Purity	>90% (NMR)
MS	523 (M+1)

1H NMR(δ) ppm

 $\begin{array}{c} 300 \text{MHz, DMSO-d6} \\ 12.\ 75\ (1\text{H, brs})\ , 8.\ 23\ (1\text{H, s}) \\ , 7.\ 95\ (1\text{H, d, J=8. 7Hz})\ , 7.\ 78\ (2\text{H, d}) \\ , 17.\ 95\ (1\text{H, d, J=8. 7Hz})\ , 7.\ 73\ (2\text{H, d}) \\ , 18.\ 4\text{Hz})\ , 7.\ 71\ (2\text{H, d, J=8. 4Hz})\ , 7.\ 24\ (2\text{H, d}) \\ , 18.\ 4\text{Hz})\ , 7.\ 63-7.\ 39\ (2\text{H, m})\ , 7.\ 52\ (2\text{H, d, J=8. 4Hz})\ , 7.\ 18\ (1\text{H, m})\ , 4.\ 31\ (1\text{H, m})\ , 2.\ 39-2.\ 20\ (2\text{H, m})\ , 2.\ 00-1.\ 76\ (4\text{H, m})\ , 1.\ 65\ (1\text{H, m})\ , 1.\ 49-1.\ 18\ (3\text{H, m})\ . \end{array}$

Example	No. 216
но	\
Purity	>90% (NMR)
MS	519 (M+1)

1H NMR(δ) ppm

 $\begin{array}{l} 300\text{MHz, DMSO-d6} \\ 12.\ 77\ (1\text{H, s})\ , 8.\ 23\ (1\text{H, d, J=} \\ 1.\ 4\text{Hz})\ , 7.\ 95\ (1\text{H, d, J=} 8.\ 6\text{Hz}) \\ , 7.\ 86\ (1\text{H, dd, J=} 8.\ 6,\ 1.\ 4\text{Hz}) \\ , 7.\ 70\ (2\text{H, d, J=} 8.\ 7\text{Hz})\ , 7.\ 56\ -7.\ 4 \\ 4\ (2\text{H, d, J=} 8.\ 8\text{Hz})\ , 7.\ 56\ -7.\ 4 \\ 8\ (2\text{H, m})\ , 7.\ 40\ (1\text{H, s})\ , 7.\ 23\ (2\text{H, d, J=} 8.\ 7\text{Hz})\ , 7.\ 10\ (1\text{H, m}) \\ , 7.\ 03\ (2\text{H, d, J=} 8.\ 8\text{Hz})\ , 4.\ 31\ (1\text{H, m})\ , 3.\ 80\ (3\text{H, s})\ , 2.\ 48\ -2\ .20\ (2\text{H, m})\ , 2.\ 00\ -1.\ 88\ (4\text{H, m}) \\ , 1.\ 66\ (1\text{H, m})\ , 1.\ 50\ -1.\ 21\ (3\ \text{H, m})\ . \end{array}$

Table 63

Example No. 217	1H NMR(δ) ppm
HO N N N	(DMSO-d6) δ :12.80(1H, brs), 8.23(1H, s), 8.04(1H, d, J=8.6Hz), 7.96(3H, d, J=8.6Hz), 7.86(1H, d, J=8.7Hz), 7.63(2H, d, J=8.6Hz), 7.25(2H, d, J=8.6Hz), 5.50(2H, s), 4.36-4.21(1H, m), 3.27(3H, s), 2.74(3H, s), 2.74(3H, s), 2.40-2.19(2H, m), 1.99-1.79(4H, m), 1.71-1.60(1H, m), 1.49-1.19(3
Purity >90% (NMR)	H, m)
MS 602 (M+1)	

Example No. 218	3 1H NMR(δ) ppm
HO N N S	300MHz, DMSO-d6 12.9(1H, brs), 8.25(1H, s), 8.04(1H, d, J=8.7Hz), 7.91(1H, d, J=8.6Hz), 7.72(2H, d, J=8.5Hz), 7.67(2H, d, J=8.7 Hz), 7.56(2H, d, J=8.5Hz), 7.26(2H, d, J=8.7Hz), 5.45(2 H, s), 4.31(1H, m), 2.71(3H, s), 2.40-2.15(2H, m), 2.05-1.80(4H, m), 1.75-1.55(1H,
Purity >90% (NMR)	m), 1.55-1.15(3H, m).
MS 558 (M+1)	

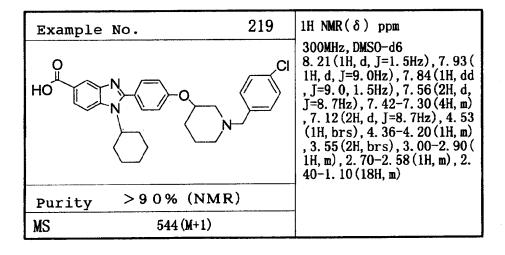


Table 64

Example No. 220	1H NMR(δ) ppm
HO N S	300MHz, DMSO-d6 12. 76 (1H, s), 8. 23 (1H, s), 7 . 96and7. 87 (2H, ABq, J=8. 9H z), 7. 69and7. 19 (4H, A'B'q, J=8. 6Hz), 7. 55 (1H, s), 7. 37 (1H, t, J=8. 1Hz), 6. 91 (1H, d , J=7. 8Hz), 6. 85 (1H, s), 6. 7 4 (1H, d, J=7. 5Hz), 5. 13 (2H, s), 4. 31 (1H, brt, J=12. 2Hz) , 2. 65 (3H, s), 2. 41-2. 20 (2H
Purity >90% (NMR)], m), 2.00-1.74(4H, m), 1.70 -1.59(1H, m), 1.58-1.20(3H
MS 540 (M+1)	, m)

Example No. 221	1H NMR(δ) ppm
HO N N N N N N N N N N N N N N N N N N N	300MHz, DMSO-d6 8. 23 (1H, s), 7. 96and7. 86 (2 H, ABq, J=8. 6Hz), 7. 69and7. 18 (4H, A'B'q, J=8. 7Hz), 7. 3 7 (1H, t, J=8. 2Hz), 6. 87 (1H, d, J=8. 2Hz), 6. 82 (1H, s), 6. 75 (1H, d, J=8. 0Hz), 5. 24 (2H, s), 4. 32 (1H, brt, J=12. 2Hz), 2. 58 (3H, s), 2. 38-2. 20 (2H, m), 2. 30 (3H, s), 2. 00-1. 7
Purity >90% (NMR)	9(4H, m), 1.70-1.59(1H, m), 1.44-1.20(3H, m)
MS 554 (M+1)	

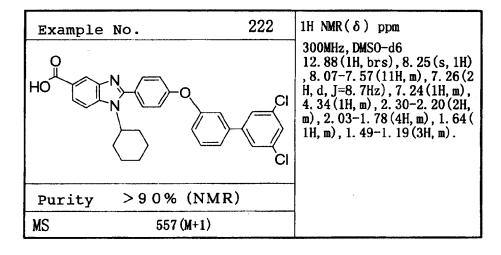


Table 65

Example No. 22	23 1H NMR(δ) ppm
HO N O N	300MHz, DMSO-d6 10. 96(1H, brs), 8. 21(1H, d, J=1. 4Hz), 7. 93(1H, d, J=8. 7 Hz), 7. 84(1H, dd, J=8. 7, 1. 4 Hz), 7. 76-7. 40(7H, m), 7. 18 (2H, d, J=8. 0Hz), 4. 24-4. 16 (2H, m), 2. 40-1. 12(18H, m)
Purity > 90% (NMR)	
MS 544 (M+1)	

Example No. 224	1H NMR(δ) ppm
HO N CI	(DMSO-d6) δ :8. 22 (1H, s), 8 .07 (1H, d, J=8. 4Hz), 7. 92 (1 H, d, J=8. 4Hz), 7. 54 (2H, d, J =8. 7Hz), 7. 40 (2H, d, J=8. 4Hz), 7. 14 (2H, d, J=8. 7Hz), 4. 61 (2H, s), 4. 48-4. 32 (1H, m), 3. 82 (1H, brd, J=12. 3Hz), 3. 65-3 .47 (2H, m), 3. 10 (brdd, J=8. 4, 12. 3Hz), 2. 40-2. 20 (2H, m
Purity >90% (NMR)), 2. 09-1. 76 (6H, m), 1. 71-1 . 16 (6H, m)
MS 544 (M+1)	

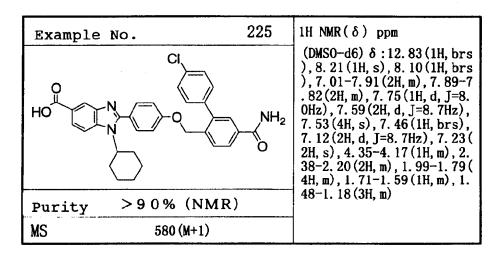


Table 66

Example No.	226	1H NMR(δ) ppm
HO N N	QCI	300MHz, DMSO-d6 8. 33and8. 08 (2H, ABq, J=8. 7 Hz), 8. 31 (1H, m), 7. 66and7. 26 (4H, A'B'q, J=9. 2Hz), 7. 4 2and7. 39 (4H, A"B"q, J=8. 7H z), 4. 57 (2H, s), 4. 50 (1H, br t, J=12. 2Hz), 3. 85-3. 62 (3H, m), 3. 28-3. 16 (2H, m), 2. 42 -2. 23 (2H, m), 2. 14-1. 81 (6H, m), 1. 72-1. 25 (6H, m)
Purity >90% (N	MR)	
MS 544 (M+1	.)	

Example No. 227	1H NMR(δ) ppm
HO NO CI	300MHz, DMSO-d6 8. 43(1H, d, J=5. 0Hz), 8. 23(1H, s), 7. 96and7. 86(2H, ABq, J=8. 6Hz), 7. 69and7. 18(4H, A'B'q, J=8. 6Hz), 7. 57(1H, s), 7. 47(1H, d, J=5. 0Hz), 7. 40(2H, t, J=8. 2Hz), 6. 91(1H, d, J=8. 3Hz), 6. 85(1H, s), 6. 77(1H, d, J=7. 9Hz), 5. 25(2H, s), 4. 31(1H, brt, J=12. 2H
Purity >90% (NMR)	z), 2. 40-2. 19 (2H, m), 1. 99- 1. 75 (4H, m), 1. 73-1. 57 (1H,
MS 554 (M+1)	m), 1.49-1.19(3H, m)

Example No.	228	1H NMR(δ) ppm
HO N	O N	300MHz, DMSO-d6 12.80(1H, brs), 8.22(1H, s), 7.94(1H, d, J=8.6Hz), 7.87 (1H, d, J=8.6Hz), 7.60(2H, d, J=8.7Hz), 7.32(2H, d, J=8.7Hz), 7.17(2H, d, J=8.7Hz), 6.70(2H, d, J=8.7Hz), 4.35-3.97(4H, m), 3.62-3.11(2H, m), 2.96(6H, s), 2.39-1.12(14H, m)
Purity >90% (NMR)	
MS 567 (M	+1)	·

Table 67

Example No.	229	1H NMR(δ) ppm
HO N O	لُم	300MHz, DMSO-d6 8. 25 (1H, s), 8. 20 (1H, s), 8. 04 (1H, dd, J=8. 1, 1. 8Hz), 7. 92 (1H, d, J=8. 1Hz), 7. 84 (1H, d, J=9. 9Hz), 7. 62-7. 50 (7H, m), 7. 12 (2H, d, J=8. 7Hz), 5. 14 (2H, s), 4. 36 (2H, q, J=6. 9Hz), 4. 30-4. 20 (1H, m), 2. 3. 8-2. 18 (2H, m), 1. 98-1. 18 (8. H, m), 1. 35 (3H, t, J=6. 9Hz)
Purity > 90% (NMR)		
MS 608 (M+1)		

Example No. 230	1H NMR(δ) ppm
HO N CF	9(1H, m), 2. 40-2. 15(2H, m), 2. 15-1. 95(2H, m), 1. 95-1. 7 5(2H, m), 1. 75-1. 55(1H, m),
Purity about 90%(NMR)	1. 55-1. 20 (3H, m).
MS 481 (M+1)	

Example No.	231	1H NMR(δ) ppm
O N O N O S	N	300MHz DMSO-d6 12. 78(1H, brs), 8. 23(1H, d, J=1. 5Hz), 7. 96(1H, d, J=8. 7 Hz), 7. 87(1H, dd, J=8. 7, 1. 5 Hz), 7. 75(2H, d, J=8. 4Hz), 7. 63(2H, d, J=8. 4Hz), 7. 52(2 H, d, J=8. 4Hz), 7. 24(2H, d, J=8. 4Hz), 5. 47(2H, s), 4. 29(1H, m), 2. 97(6H, brs), 2. 72(3H, s), 2. 39-2. 16(2H, m), 2.
Purity about 90%(NMR)	00-1.78(4H, m), 1.71-1.59(1H, m), 1.49-1.17(3H, m).
MS 595 (M+1)		

Table 68

Example No.	232	lH NMR(δ) ppm
HO N O		300MHz, DMSO-d6 12.8 (1H, brs), 8.22 (1H, s), 7.96 (1H, d, J=8.7Hz), 7.86 (1H, d, J=8.6Hz), 7.70 (1H, s), 7.59 (2H, d, J=8.7Hz), 7.53 -7.50 (5H, m), 7.42 (1H, d, J= 7.9Hz), 7.12 (2H, d, J=8.7Hz), 5.11 (2H, s), 4.27 (1H, m), 3.01 (3H, brs), 2.97 (3H, brs), 12.40-2.15 (2H, m), 2.00-1
Purity > 90% (NM	IR)	.75(4H, m), 1.75-1.55(1H, m), 1.50-1.15(3H, m).
MS 608 (M+1)		

Example No.	233	1H NMR(δ) ppm
HCI N		DMSO-d6 13. 20 (1H, brs), 8. 99 (1H, s), 8. 32 (1H, s), 8. 25 (1H, d, J=8. 8Hz), 8. 04 (1H, d, J=8. 6Hz), 7. 79-7. 74 (4H, m), 7. 60 (2H, d, J=8. 7Hz), 5. 26 (2H, s), 4. 36 (1H, m), 2. 72 (3H, s), 2. 50-2. 15 (2H, m), 2. 15-1. 95 (2H, m), 1. 95-1. 75 (2H, m), 1. 75-1.
Purity >90	% (NMR)	55 (1H, m), 1.55-1.15 (3H, m)
MS 553	(M+1-HC1)	

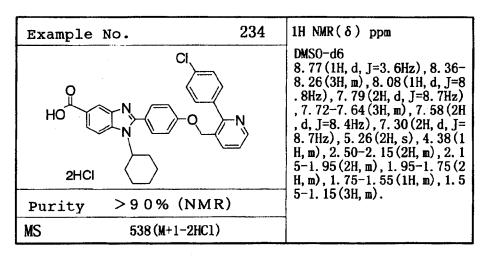


Table 69

Example No.	235	1H NMR(δ) ppm
HO N		300MHz, DMSO-d6 12.74(1H, brs), 8.67(1H, dd , J=3.1, 1.6Hz), 8.21(1H, d, J=1.6Hz), 7.93(1H, dJ=8.6H z), 7.90-7.80(2H, m), 7.60- 7.50(7H, m), 7.09(2H, d, J=8 .7Hz), 5.16(2H, s), 4.26(1H ,m), 2.40-2.20(2H, m), 2.00 -1.60(5H, m), 1.50-1.20(3H ,m)
Purity > 90% (NMR)		
MS APCI-Ms 538(M+1)		

Example No.	236	1H NMR(δ) ppm
HO N N N N N N N N N N N N N N N N N N N	CI CF ₃ CO ₂ H	300MHz, DMSO-d6 8.40-7.40(11H, m), 2.95, 2. 81(3H, each d, J=4.7Hz), 2.40-2.20(2H, m), 2.10-1.80(4H, m), 1.70- 1.60(1H, m), 1.50-1.20(3H, m)
Purity >90% (N	MR)	
MS APCI-Ms 555	(M+1)	

Example No.	237	1H NMR(δ) ppm
CI N O	HZ Z	300MHz, DMSO-d6 8. 21 (1H, s), 8. 15 (1H, d, J=9 .5Hz), 8. 02 (1H, s), 8. 00-7. 80 (3H, m), 7. 70-7. 50 (6H, m) , 7. 12 (2H, d, J=8. 7Hz), 5. 16 (2H, s), 4. 28 (1H, m), 2. 40-2 .20 (2H, m), 2. 00-1. 80 (4H, m)), 1. 65 (1H, m), 1. 50-1. 20 (3 H, m)
Purity >90% (NMR	t)	·
MS FAB-Ms 605 (M+1)	

Table 70

Example No. 2	238	1H NMR(δ) ppm
HCI NON NON NON NON NON NON NON NON NON NO		300MHz, DMSO-d6 12.80(1H, brs), 8.54(1H, s), 8.25(1H, s), 7.98and7.88(2H, Abq, J=8.6Hz), 7.76(2H, d, J=8.6Hz), 7.53-7.31(3H, m), 6.61(1H, s), 5.46(2H, s), 4.32(1H, brt), 2.40-2.20(2H, m), 2.02-1.79(4H, m), 1.69-1.59(1H, m), 1.48-1.19(3H, m)
Purity > 90% (NMR)		
MS APCI-Ms 521(M+1)		

Example No.	239	1H NMR(δ) ppm
HO NO	-CN	300MHz, DMSO-d6 12. 79(1H, brs), 8. 60(2H, d, J=1. 5Hz), 8. 53(1H, s), 8. 25 (1H, s), 7. 98and7. 85(2H, AB q, J=9. 4Hz), 7. 76(2H, d, J=9. 0Hz), 7. 44(4H, d, J=6. 5Hz), 6. 69(1H, s), 5. 53(2H, s), 4. 32(1H, brt), 2. 40-2. 19(2H, m), 2. 03-1. 82(4H, m), 1. 72-1. 61(1H, m),
Purity > 90% (NMR)		1.42-1.22(3H, m)
MS APCI-Ms 522 (M+1)		

Example N	10.	240	1H NMR(δ) ppm
но	N N	CI	300MHz, DMSO-d6 8.90(1H, s), 8.32(1H, s), 8. 28(1H, s), 8.25(1H, d, J=8.3 Hz), 8.05(1H, d, J=8.8Hz), 7 .96(1H, s), 7.93(1H, d, J=8.8Hz), 7.83(1H, d, J=8.4 Hz), 7.68-7.59(2H, m), 7.54 (2H, d, J=8.8Hz), 4.37(1H, b rt), 2.30(2H, m), 2.00(2H, m), 1.88(2H, m), 1.67(1H, m),
Purity	>90% (NMR)		1.5-1.2(3H, m)
MS	APCI-Ms 525 (M+1)		

Table 71

	Table 71	
Ex. No.	Formula	MS
1001	H ₂ N O H ₃ C	364 (M+H)
1002	H ₂ N CCH ₃	454 (M+H)
1003	H ₂ N O	398 (M+H)
1004	H ₂ N N	357 (M+H)
1005	H ₂ N OH	322 (M+H)
1006	H ₂ N CI	385 (M+H)

Table 72

	Table /2	
Ex. No.	Formula	MS
1007	H ₂ N N	357 (M+H)
1008	H ₂ N CH ₃	416 (M+H)
1009	H ₂ N N N N N N N N N N N N N N N N N N N	310 (M+H)
1010	H ₂ N O F F	390 (M+H)
1011	H ₂ N NO ₂	395 (M+H)
1012	H ₂ N OH	366 (M+H)

Table 73

	Table /3	
Ex. No.	Formula	MS
1013	F	374 (M+H)
	₽ F	' '
	H ₂ N \	
1014	9	382 (M+H)
	H ₂ N	
1015	O,	350 (M+H)
	р у∕он	
	H ₂ N N	
	N C	
1016		402 (M+H)
1016	F,	402 (M+H)
	H ₂ N	
	N W	
	Br	
1017		414 (M+H)
1017	0	414 (M+H)
	H ₂ N N	
	H ₂ N CH ₃	
	N CH ₃	
	Br	
1018	Q	340 (M+H)
	H ₂ N \	
	, , , , , , , , , , , , , , , , , , ,	
	CI	
	-	

Table 74

	Table /4	
Ex. No.	Formula	MS
1019	H ₂ N N	350 (M+H)
1020	H ₂ N O O O O O O O O O O O O O O O O O O O	380 (M+H)
1021	H ₂ N OH	366 (M+H)
1022	H ₂ N CH ₃	378 (M+H)
1023	H ₂ N Br	402 (M+H)

Table 75

	Table 75	
Ex. No.	Formula	MS
1024	H ₂ N N	518 (M+H)
1025	H ₂ N CI F F	408 (M+H)
1026	H ₂ N OH	336 (M+H)
1027	H ₂ N N	408 (M+H)
1028	H ₂ N OH	366 (M+H)
1029	H ₂ N CH ₃	362 (M+H)

Table 76

	Table /6	
Ex. No.	Formula	MS
1030	H ₂ N N	473 (M+H)
1031	OH N OH	338 (M+H)
1032	H ₂ N N	307 (M+H)
1033	H ₂ N O CI	406 (M+H)
1034	H ₂ N F F	466 (M+H)
1035	H ₂ N N	412 (M+H)

Table 77

	Table //	
Ex. No.	Formula	MS
1036	H ₂ N CH ₃	412 (M+H)
1037	H ₂ N CH ₃	428 (M+H)
1038	H ₂ N CI	466 (M+H)
1039	H ₂ N CI	406 (M+H)
1040	H ₂ N O NO ₂	417 (M+H)
1041	H ₂ N O F F	440 (M+H)

Table 78

	Table 78	
Ex. No.	Formula	MS
1042	H ₂ N NO ₂	417 (M+H)
1043	H ₂ N O	440 (M+H)
1044	H ₂ N N	312 (M+H)
1045	H ₂ N N N N N N N N N N N N N N N N N N N	423 (M+H)
1046	H ₂ N OH CH ₃	352 (M+H)
1047	H ₂ N N	307 (M+H)

Table 79

Table 79		
Ex. No.	Formula	MS
1048	H ₂ N F F	374 (M+H)
1049	H_2N	398 (M+H)
1050	H ₂ N S CH ₃	326 (M+H)
1051	H ₂ N O-CH ₃	442 (M+H)
1052	H ₂ N N	518 (M+H)

Table 80

Table 80		
Ex. No.	Formula	MS
1053	H ₂ N CH ₃	442 (M+H)
1054	H ₂ N OH	376 (M+H)
1055	H ₂ N N H ₃ C	442 (M+H)
1056	H ₂ N OH	352 (M+H)
1057	H ₂ N OH NO ₂	367 (M+H)
1058	H ₂ N NO ₂ OH	367 (M+H)

Table 81

	Table 81	
Ex. No.	Formula	MS
1059	H ₂ N CH ₃	364 (M+H)
1060	H ₂ N F	324 (M+H)
1061	H ₂ N OH	352 (M+H)
1062	H ₂ N S NO ₂	357 (M+H)
1063	H ₂ N F F	360 (M+H)
1064	H_2N N N N N N N N N N	351 (M+H)

Table 82

	Table 82	
Ex. No.	Formula	MS
1065	H ₂ N NO ₂	351 (M+H)
1066	H ₂ N CH ₃	366 (M+H)
1067	H ₂ N N NO ₂	367 (M+H)
1068	H ₂ N CH ₃	364 (M+H)
1069	H ₂ N OH	350 (M+H)
1070	H ₂ N N	306 (M+H)

Table 83

Table 83		
Ex. No.	Formula	MS
1071	HO N H ₃ C	365 (M+H)
1072	HO CH ₃	455 (M+H)
1073	HO NO	399 (M+H)
1074	HO N	358 (M+H)
1075	HO CH ₃	337 (M+H)
1076	HO NO ₂	386 (M+H)

Table 84

Table 84		
Ex. No.	Formula	MS
1077	но	358 (M+H)
1078	HO N CH ₃	417 (M+H)
. 1079	HO NH NH	311 (M+H)
1080	HO PFF	391 (M+H)
1081	HO NO ₂	396 (M+H)
1082	НО	367 (M+H)

Table 85

	Table 85	
Ex. No.	Formula	MS
1083	HO F F	375 (M+H)
1084	но	351 (M+H)
1085	HO N	383 (M+H)
1086	HO P Br	403 (M+H)
1087	HO CH ₃	415 (M+H)
1088	CI Z Z Z	341 (M+H)

Table 86

Table 86		
Ex. No.	Formula	MS
1089	H ₃ C	351 (M+H)
1090	но	381 (M+H)
1091	HO N	367 (M+H)
1092	HO CH ₃	379 (M+H)
1093	Br N N	403 (M+H)

Table 87

Table 87		
Ex. No.	Formula	MS
1094	HO NO	519 (M+H)
1095	HO CI N P F F	409 (M+H)
1096	HO N CH ₃	337 (M+H)
1097	HO N	409 (M+H)
1098	но он он	367 (M+H)
1099	HO CH ₃	363 (M+H)

Table 88

Table 88		
Ex. No.	Formula	MS
1100	HO N	474 (M+H)
1101	HO OH OH	339 (M+H)
1102	HO N	308 (M+H)
1103	HO F F	467 (M+H)
1104	HO	413 (M+H)
1105	HO CH ₃	413 (M+H)

Table 89

	Table 89	
Ex. No.	Formula	MS
1106	HO CH ₃	429 (M+H)
1107	HO CI	467 (M+H)
1108	HOLL	
1109	HO NO ₂	
1110	HO F F F	441 (M+H)
1111	HO NO ₂	418 (M+H)

Table 90

Table 90		
Ex. No.	Formula	MS
1112	HO N	313 (M+H)
1113	HON	308 (M+H)
1114	HO F-F	375 (M+H)
1115	HO N	399 (M+H)
1116	HO S CH ₃	327 (M+H)
1117	HO O-CH ₃	443 (M+H)

Table 91

	Table 91		
Ex. No.	Formula	MS	
1118	HO	519 (M+H)	
1119	HO CH ₃	443 (M+H)	
1120	но	377 (M+H)	
1121	HO O-CH ₃	443 (M+H)	
1122	HO CH ₃	353 (M+H)	

Table 92

	Table 92		
Ex. No.	Formula	MS	
1123	HO NO ₂	368 (M+H)	
1124	HO NO ₂	368 (M+H)	
1125	HO N CH ₃	365 (M+H)	
1126	HO N F	325 (M+H)	
1127	HO N O-CH ₃	353 (M+H)	
1128	HO N S NO ₂	358 (M+H)	

Table 93

	Table 93		
Ex. No.	Formula	MS	
1129	HO F F	361 (M+H)	
1130	HO NO ₂	352 (M+H)	
1131	HO NO ₂	352 (M+H)	
1132	HO CH ₃	367 (M+H)	
1133	HO NO ₂	368 (M+H)	
1134	HO N O CH ₃	365 (M+H)	

Table 94

	Table 94	MC
Ex. No.	Formula	MS
1135	Q	351 (M+H)
1133	!	
	HO N /	
	N OH	
1136	Q	307 (M+H)
	HO	
	\ \ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	ļ
1137		385 (M+H)
1137		383 (M+H)
	HO S CH ₃	
	N O	
1138	Ω	365 (M+H)
	HO	
	N	
	<u></u>	
1139	,cı	467 (M+H)
	/ <	
	o—()	
	HO	
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
1140	9 🗇	387 (M+H)
1140	, / \	
	HO CH ₃	
	l	
	N W	
	<u> </u>	

Table 95

	Table 95	·
Ex. No.	Formula	MS
1141	HO CH ₃	322 (M+H)
1142	HO CH ₃	364 (M+H)
1143	НО	323 (M+H)
1144	HO CH ₃	363 (M+H)
1145	HO CH ₃	484 (M+H)
1146	HO NO	385 (M+H)

Table 96

Table 96		
Ex. No.	Formula	MS
1147	HO	427 (M+H)
1148	HO CH ₃	420 (M+H)
1149	HO HO CI	508 (M+H)
1150	HO TO THE PART OF	458 (M+H)
1151	HO HO HO	458 (M+H)

Table 97

	Table 9/	T
Ex. No.	Formula	MS
1152	HO NO	474 (M+H)
1153	HO NOTE OF THE PARTY OF THE PAR	458 (M+H)
1154	F F F	508 (M+H)
1155	HO CH ₃	454 (M+H)

Table 98

	Table 98	
Ex. No.	Formula	MS
1156	HO NOME	470 (M+H)
1157	H ₃ C CH ₃ CCH ₃	496 (M+H)
1158	HO TO	482 (M+H)
1159	HO N-CH ₃	448 (M+H)
1160	HO HO CI	488 (M+H)

Table 99

Table 99		
Ex. No.	Formula	MS
1161	HO HO HO	468 (M+H)
1162	HO N CH ₃	447 (M+H)
1163	HO	466 (M+H)
1164	OMe HO N	526 (M+H)
1165	HO	420 (M+H)

Table 100

	Table 100	
Ex. No.	Formula	MS
1166	HO NO	490 (M+H)
1167	HO CH ₃	435 (M+H)
1168	HO CH ₃	436 (M+H)
1169	HO NO CH ₃	436 (M+H)
1170	HO TO THE TOTAL PARTY OF THE TOT	404 (M+H)
1171	H ₃ C CH ₃	406 (M+H)

Table 101

	Table 101	
Ex. No.	Formula	MS
1172	HO CH ₃	392 (M+H)
1173	H ₃ C CH ₃ CH ₃ CH ₃	420 (M+H)
1174	HO CH ₃	406 (M+H)
1175	HO CH ₃	420 (M+H)
1176	HO N	523 (M+H)
1177	HO CH ₃ CH ₃ CH ₃	406 (M+H)

Table 102

Table 102		
Ex. No.	Formula	MS
1178	HO N CH ₃	447 (M+H)
1179	HO CH ₃	433 (M+H)
1180	HO NO	509 (M+H)
1181	HO NO	513 (M+H)

Table 103

Table 103		
Ex. No.	Formula	MS
1182	HO N N N N N N N N N N N N N N N N N N N	497 (M+H)
1183	HO NO	496 (M+H)
1184	HO N	418 (M+H)
1185	HO N	508 (M+H)
1186	HO CH ₃	490 (M+H)

Table 104

	Table 104	
Ex. No.	Formula	MS
1187	HO NO	441 (M+H)
1188	HO HO	455 (M+H)
1189	HO N	455 (M+H)
1190	HO CH ₃	513 (M+H)
1191	HO H	504 (M+H)
1192	HO TO THE STATE OF	494 (M+H)

Table 105

	Table 105	MC
Ex. No.	Formula	MS
1193	HO CH ₃	512 (M+H)
1194	HO Br	504 (M+H)
1195	HO HO	516 (M+H)
1196	HO CH ₃	497 (M+H)
1197	HO NOME	456 (M+H)
1198	HO H	509 (M+H)

Table 106

Table 106		
Ex. No.	Formula	MS
1199	HO CH ₃	483 (M+H)
1200	HO NO	427 (M+H)
1201	HO HO NO	427 (M+H)
1202	HO H	477 (M+H)
1203	HO S O CH ₃	519 (M+H)
1204	HO NO	440 (M+H)

Table 107

	Table 107	
Ex. No.	Formula	MS
1205	HO NO	454 (M+H)
1206	HO PF	325 (M+H)
1207	HO N CI	341 (M+H)
1208	HO N Br	385 (M+H)
1209	HO CH ₃	363 (M+H)
1210	HO CN	332 (M+H)

Table 108

	Table 108	
Ex. No.	Formula	MS
1211	HO CH ₃	351 (M+H)
1212	HO CH ₃	335 (M+H)
1213	HO CH ₃	349 (M+H)
1214	HO CH ₃	321 (M+H)
1215	HO N F F	375 (M+H)
1216	но	367 (M+H)

Table 109

	Table 109	
Ex. No.	Formula	MS
1217	HO CO	433 (M+H)
1218	HO F F	391 (M+H)
1219	HO NO-CH ₃	337 (M+H)
1220	HO N Br	385 (M+H)
1221	HO CI	341 (M+H)
1222	HO CN	332 (M+H)

Table 110

	Table 110	
Ex. No.	Formula	MS
1223	HO CH ₃	395 (M+H)
1224	HO NO CI	375 (M+H)
1225	HO CH ₃	351 (M+H)
1226	HO N CH ₃	321 (M+H)
1227	но	426 (M+H)
1228	HO CI	460 (M+H)

Table 111

	Table 111	
Ex. No.	Formula	MS
1229	но	442 (M+H)
1230	HO CH ₃	468 (M+H)
1231	но	456 (M+H)
1232	HO CI	494 (M+H)
1233	HO CN	451 (M+H)
1234	HO CH ₃	468 (M+H)

Table 112

Table 112		
Ex. No.	Formula	MS
1235	HO CH ₃	498 (M+H)
1236	HO NO	476 (M+H)
1237	HO H	502 (M+H)
1238	HO HO S NH ₂	
1239	NH ₂	469 (M+H)

Table 113

	Table 113	
Ex. No.	Formula	MS
. 1240	HO NO	483 (M+H)
1241	но	408 (M+H)
1242	HO CI	460 (M+H)
1243	HO CH ₃	468 (M+H)
1244	HO F F	494 (M+H)
1245	H ₃ C CH ₃	454 (M+H)

Table 114

	Table 114	1
Ex. No.	Formula	MS
1246	H ₃ C	468 (M+H)
1247	HO CH ₃	498 (M+H)
1248	HO H ₃ C CH ₃	482 (M+H)
1249	HO CH ₃	468 (M+H)
1250	HO THE COLUMN THE COLU	460 (M+H)

Table 115

Table 115		
Ex. No.	Formula	MS
1251	HO NOH	442 (M+H)
1252	HO CH ₃	468 (M+H)
1253	но	456 (M+H)
1254	HO CI	494 (M+H)

Table 116

Table 116		
Ex. No.	Formula	MS
1255	HO N N N N N N N N N N N N N N N N N N N	451 (M+H)
1256	HO CH ₃	468 (M+H)
1257	HO CH ₃	498 (M+H)
1258	HO N	470 (M+H)

Table 117

Table 117		
Ex. No.	Formula	MS
1259	HO HO	476 (M+H)
1260	HO N	502 (M+H)
1261	NH ₂ N N N N N N N N N N N N N N N N N N N	505 (M+H)
1262	NH ₂	469 (M+H)

Table 118

Table 118		
Ex. No.	Formula	MS
1263	HO NH	483 (M+H)
1264	HO N OH	408 (M+H)
1265	HO N CI	460 (M+H)
1266	HO CH ₃	468 (M+H)

Table 119

	Table 119	
Ex. No.	Formula	MS
1267	HO N	494 (M+H)
1268	HO CH ₃	454 (M+H)
1269	HO CH ₃	468 (M+H)
1270	CH. S	498 (M+H)

Table 120

Table 120		
Ex. No.	Formula	MS
1271	H ₃ C CH ₃ CH ₃	482 (M+H)
1272	HO CH ₃	468 (M+H)
1273	HO NH	494 (M+H)
1274	HO HO CH ₃	484 (M+H)

Table 121

	Table 121	
Ex. No.	Formula	MS
1275	HO N O CH ₃	519 (M+H)
1276	HO THE STATE OF TH	427 (M+H)
1277	HO N	456 (M+H)
1278	HO N	516(M+H)

Table 122

Table 122		
Ex. No.	Formula	MS
1279	HO CH ₃	436 (M+H)
1280	HO HO	426 (M+H)
1281	HO NO	440 (M+H)
1282	HO THO	454 (M+H)
1283	HO HO HO	468 (M+H)

Table 123

Table 123		
Ex. No.	Formula	MS
1284	HO N N	482 (M+H)
1285	CH ₃	406 (M+H)
	но	
1286	HO CH ₃	420 (M+H)
1287	CC NO	508 (M+H)
1288	HO	508 (M+H)

Table 124

Table 124		
Ex. No.	Formula	MS
1289	HO N	509 (M+H)
1290	HO N	455 (M+H)
1291	HO H	494 (M+H)
1292	HO N	418 (M+H)

Table 125

	Table 125	
Ex. No.	Formula	MS
1293	HO HO	490 (M+H)
1294	HO H ₃ C CH ₃	496 (M+H)
1295	HO N	477 (M+H)
1296	HO N F F	508 (M+H)
1297	HO CH ₃	470 (M+H)

Table 126

Table 126		
Ex. No.	Formula	MS
1298	HO HO CH ₃	435 (M+H)
1299	HO N	488 (M+H)
1300	HO CH ₃	454 (M+H)
1301	HO N H	504 (M+H)

	Table 127	
Ex. No.	Formula	MS
1302	H ₃ C HN O-CH ₃	513 (M+H)
1303	HO NO	399 (M+H)
1304	HO N	530 (M+H)
1305	Ho H ₃ C	504 (M+H)
1306	HO H ₃ C	440 (M+H)

Table 128

	Table 128	
Ex. No.	Formula	MS
1307	HO CI	494 (M+H)
1308	HO CI	508 (M+H)
1309	HO NO	518 (M+H)
1310	HO NO	532 (M+H)
1311		522 (M+H)

Table 129

Table 129		
Ex. No.	Formula	MS
1312	HO CH ₃	546 (M+H)
1313	HO NO	484 (M+H)
1314	HO N CI	517 (M+H)
1315	HO N	488 (M+H)
1316	HO CI	481 (M+H)

Table 130

T 37	Table 130	***
Ex. No.	Formula	MS
1317	HO NO	413 (M+H)
1318	HO N	423 (M+H)
1319	HO NO	504 (M+H)
1320	Ho Ho CH ₃	510 (M+H)
1321	HO N CI	522 (M +H)
1322	HO N F F	522 (M+H)

Table 131

Table 131		
Ex. No.	Formula	MS
1323	но по	484 (M+H)
1324	HO	449 (M+H)
1325	HO N CI	502 (M+H)
1326	HO N	491 (M+H)
1327	H ₃ C CH ₃ CH ₃	496 (M+H)

Table 132

	Table 132	
Ex. No.	Formula	MS
1328	HO SHOW SHOW SHOW SHOW SHOW SHOW SHOW SH	497 (M+H)
1329	HO NO HO	470 (M+H)
1330	HO NO	530 (M+H)
1331	D ZH	502 (M+H)
1332		522 (M+H)

Table 133

	Table 133	
Ex. No.	Formula	MS
1333	HO HO	491 (M+H)
1334	HO CI CI	536 (M+H)
1335	HO NH ₂	547 (M+H)
1336	но	484 (M+H)
1337	HO CH ₃	484 (M+H)
1338	но	498 (M+H)

Table 134

	Table 134	
Ex. No.	Formula	MS
1339	HO CH ₃	528 (M+H)
1340	HO N N N N N N N N N N N N N N N N N N N	498 (M+H)
1341	HO CH ₃	514 (M+H)
1342	HO NO ₂	513 (M+H)
1343	HO CO	488 (M+H)
1344	HO CO	502 (M+H)

Table 135

	Table 135	
Ex. No.	Formula	MS
1345	но	488 (M+H)
1346	но	502 (M+H)
1347	HO NO ₂	499 (M+H)
1348	HO NO	480 (M+H)
1349	HO N N N N N N N N N N N N N N N N N N N	522 (M+H)
1350	HO Br	546 (M+H)

Table 136

	Table 136	
Ex. No.	Formula	MS
1351	HO	482 (M+H)
1352	HO H ₃ C CH ₃	484 (M+H)
1353	HO TO THE CHAIN CH	609 (M+H)
1354	HO HO HO	532 (M+H)
1355	HO NH	480 (M+H)
1356	HO N CI	566 (M+H)

Table 137

	Table 137	T
Ex. No.	Formula	MS
1357	HO N O O O O O O O O O O O O O O O O O O	602 (M+H)
1358		596 (M+H)
1359	HO NO	491 (M+H)
1360	HO N N N N N N N N N N N N N N N N N N N	491 (M+H)
1361	но	491 (M+H)
1362	HO CH ₃	496 (M+H)

Table 138

Table 138		
Ex. No.	Formula	MS
1363	HO CH ₃	512 (M+H)
1364	HO N N N N N N N N N N N N N N N N N N N	494 (M+H)
1365	HO N CI	488 (M+H)
1366	HO NH	481 (M+H)
1367	HO N O O O	524 (M+H)
1368	HO S	497 (M+H)

Table 139

	Table 139	
Ex. No.	Formula	MS
1369	HO TO	472 (M+H)
1370	HO NO	469 (M+H)
1371	HO CH ₃	470 (M+H)
1372	HO L	469 (M+H)
1373	HO THE	494 (M+H)
.1374	HO NH	458 (M+H)

Table 140

Dec M	Table 140	T
Ex. No.	Formula	MS
1375	HO CI	612 (M+H)
1376	HO CH ₃	554 (M+H)
1377	HO O O O CH ₃ CH ₃	542 (M+H)
1378	но	526 (M+H)
1379	HO H ₃ C CH ₃	496 (M+H)
1380	HO CH ₃	510 (M+H)

Table 141

	Table 141	
Ex. No.	Formula	MS
1381	HO CH ₃	540 (M+H)
1382	HO CH ₃	525 (M +H)
1383	HO N	558 (M+H)
1384	HO N CI	523 (M+H)
1385	HO HO HO F F	539 (M+H)

Table 142

M-77-7-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	Table 142	
Ex. No.	Formula	MS
1386	но N СН ₃ СН ₃	533 (M+H)
1387	HO NO ₂	500 (M+H)
1388	HO NO HACO	485 (M+H)
1389	HO N CI	523 (M+H)
1390	HO HO N S	512 (M+H)

Table 143

	Table 143	
Ex. No.	Formula	MS
1391	HO TO CI	540 (M+H)
1392	HO H ₃ C N H N N N N N N N N N N N N N N N N N	527 (M+H)
1393	HO N N F F	525 (M+H)
1394	HO N N N N N N N N N N N N N N N N N N N	507 (M+H)
1395	HO N H	491 (M+H)
1396	HO N N N N N N N N N N N N N N N N N N N	506 (M+H)

Table 144

To Ma	Table 144	1
Ex. No.	Formula	MS
1397	HO NO CI	522 (M+H)
1398	HO P F F	538 (M+H)
1399	HO TO CI	522 (M+H)
1400	HO HO	530 (M+H)
1401	O PH O	600 (M+H)
1402	HO CH ₃ N CH ₃ CH ₃	504 (M+H)

Table 145

	Table 145	
Ex. No.	Formula	MS
1403	H ₃ C-0	534 (M+H)
1404	HO N CI	475 (M+H)
1405	HO HO Z	472 (M+H)
1406	HO TO THE TOTAL PROPERTY OF THE TOTAL PROPER	455 (M+H)
1407	PO P	469 (M+H)
1408	HO HO NH ₂	547 (M+H)

Table 146

Ex. No.	Formula	MS
HA. 110.	rotinata	l Mo
1409	HO NO ₂	529 (M+H)
1410	HO HO H ₃ C N-CH ₃	435 (M+H)
1411	HO NO	504 (M+H)
1412	HO HO	469 (M+H)
1413	HO CI	522 (M+H)
1414	HO HO C	488 (M+H)

Table 147

	Table 14/	
Ex. No.	Formula	MS
1415	HO CI	502 (M+H)
1416	HO HO CO	488 (M+H)
1417	HO HO CI	502 (M+H)
1418	HO HO N	455 (M+H)
1419	HO	455 (M+H)
1420	HO	522 (M+H)

Table 148

	Table 148	
Ex. No.	Formula	MS
1421	HO N	469 (M+H)
1422	HO CI	536 (M+H)
1423	HO H ₃ C CH ₃	510 (M+H)
1424	HO POPULATION OF THE POPULATIO	494 (M+H)
1425	HO N N N N N N N N N N N N N N N N N N N	458 (M+H)

Table 149

Table 149		
Ex. No.	Formula	MS
1426	HO CI	612 (M+H)
1427	OH NO	526 (M+H)
1428	HO HO HO	480 (M+H)
1429	HO NO	441 (M+H)
1430	HO CH ₃	511 (M+H)

Table 150

	Table 150	
Ex. No.	Formula	MS
1431	HO TO THE TOTAL PROPERTY OF THE TOTAL PROPER	530 (M+H)
1432	HO N N N N N N N N N N N N N N N N N N N	497 (M+H)
1433	HO HO N	441 (M+H)
1434	HO H	491 (M+H)
1435	HO NO	491 (M+H)
1436	HO NO	491 (M+H)

Table 151

	Table 151	
Ex. No.	Formula	MS
1437	HO CI	524 (M+H)
1438	HO HO CI	508 (M+H)
1439	но	474 (M+H)
1440	HO HO	490 (M+H)
1441	но	508 (M+H)
1442	HO CI	474 (M+H)

Table 152

	Table 152	
Ex. No.	Formula	MS
1443	HO TO	516 (M+H)
1444	CI C	
1445	HO HO CH ₃	504 (M+H)
1446	H ₃ C-O CI	534 (M+H)
1447	HO N CI	475 (M+H)

Table 153

/	Table 153	
Ex. No.	Formula	MS
1448	HO HO	530 (M+H)
1449	но	440 (M+H)
1450	но	490 (M+H)
1451	но	474 (M+H)
1452	но	441 (M+H)
1453	HO N CI	508 (M+H)

Table 154

	Table 154	
Ex. No.	Formula	MS
1454	HO N N N N N N N N N N N N N N N N N N N	455 (M+H)
1455	но	522 (M+H)
1456	HO H ₃ C CH ₃	496 (M+H)
1457	HO HO	516 (M+H)
1458	HO HO	426 (M+H)
1459	HO CH ₃ CH ₃	482 (M+H)

Table 155

	Table 155	
Ex. No.	Formula	MS
1460	HO N O-CH ₃ CH ₃	486 (M+H)
1461	HO HO	516 (M+H)
1462	HO N	427 (M+H)
1463	HO HO	476 (M+H)
1464	HO N CI	460 (M+H)
1465	HO N	502 (M+H)

Table 156

	Table 156	
Ex. No.	Formula	MS
1466	CI CI	586 (M+H)
1467	HO 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	518 (M+H)
1468	HO N	530 (M+H)
1469	HO CI	598 (M+H)
1470	но	512 (M+H)
1471	HO N	544 (M+H)

Table 157

	Table 157	
Ex. No.	Formula	MS
1472	HO HO	440 (M+H)
1473	HO HO	490 (M+H)
1474	HO CI	474 (M+H)
1475	HO NO	441 (M+H)
1476	HO CI	508 (M+H)
1477	HO NO	455 (M+H)

Table 158

Table 158		
Ex. No.	Formula	MS
1478	HO CI	522 (M+H)
1479	HO H ₃ C CH ₃	496 (M+H)
1480	HO	516 (M+H)
1481	HO N	426 (M+H)
1482	H ₃ C CH ₃ CH ₃	482 (M+H)

Table 159

Table 139		
Ex. No.	Formula	MS
1483	HO CH ₃	486 (M+H)
1484	HO N	516 (M+H)
1485	HO N	427 (M+H)
1486	HO	476 (M+H)

Table 160

Table 160		
Ex. No.	Formula	MS
1487	HO N	460 (M+H)
1488	HO NO	502 (M+H)
1489	HO CI	586 (M+H)
1490	HO TO	518 (M+H)

Table 161

	Table 161	
Ex. No.	Formula	MS
1491	HO N	530 (M+H)
1492	CI—	598 (M+H)
	HO CI	
1493	но	512 (M+H)
1494	HO	544 (M+H)

Table 162

	Table 162	
Ex. No.	Formula	MS
1495	HO CH ₃	580 (M+H)
1496	HO TO	550 (M+H)
1497	HO CH ₃ CH ₃ CH ₃ CH ₃	606 (M+H)
1498	HO CI	580 (M+H)
1499	HO	550 (M+H)

Table 163

	Table 163	
Ex. No.	Formula	MS
1500	H ₃ C CH ₃ CH ₃	606 (M+H)
1501	HO CH ₃	630 (M+H)
1502	HO NO F	600 (M+H)
1503	HO CH ₃ N GH ₃ C CH ₃ F	656 (M+H)

Table 164

Table 164		
Ex. No.	Formula	MS
1504	HO N O F F	630 (M+H)
1505	HO N S F F	600 (M +H)
1506	H ₃ C CH ₃ CH ₃ CH ₃	656 (M+H)
1507	HO CH ₃	580 (M+H)

Table 165

	Table 165	
Ex. No.	Formula	MS
1508	HO	550 (M+H)
1509	HO CH ₃	606 (M+H)
1510	HO CI	580 (M+H)
1511	HO CI	550 (M+H)
1512	HO CH ₃	546 (M+H)

Table 166

	Table 166	··
Ex. No.	Formula	MS
1513	HO NO	516 (M+H)
1514	HO CH ₃	572 (M+H)
1515	но — N — N — N — N — N — N — N — N — N —	546 (M+H)
1516	HO NO	516 (M+H)
1517	H ₃ C CH ₃ CH ₃	572 (M+H)

Table 167

	Table 167	-
Ex. No.	Formula	MS
1518	HO CH ₃ CCH ₃	602 (M+H)
1519	H ₃ C CH ₃	572 (M+H)
1520	H ₃ C CH ₃ H ₃ C CH ₃	628 (M+H)
1521	H ₃ C CH ₃	606 (M+H)

Table 168

	Table 168	
Ex. No.	Formula	MS
1522	HO N N N N N N N N N N N N N N N N N N N	573 (M+H)
1523	HO N CI	606 (M+H)
1524	HO CH ₃ H ₃ C CH ₃	602 (M+H)
1525	HO CH ₃ CH ₃ CH ₃	572 (M+H)

Table 169

<i>y</i>	Table 169	
Ex. No.	Formula	MS
1526	H ₃ C CH ₃ CH ₃	628 (M+H)
1527	HO CH ₃	606 (M+H)
1528	HO CH ₃ CH ₃ CH ₃	606 (M+H)
1529	HO CH ₃	614 (M+H)

Table 170

	Table 170	
Ex. No.	Formula	MS
1530	HO N N F F	584 (M+H)
1531	HO CH ₃ H ₃ C CH ₃	640 (M+H)
1532	HO N CI	618 (M+H)
1533	HO N F F	614 (M+H)
1534	HO N F F	584 (M+H)

Table 171

Table 1/1		
Ex. No.	Formula	MS
1535	H ₃ C CH ₃ CH ₃ CH ₃	640 (M+H)
1536	CI————————————————————————————————————	627 (M+H)
1537	F F F F F F F F F F F F F F F F F F F	627 (M+H)

Table 172

Table 172		
Ex. No.	Formula	MS
1538	HO HIN	560 (M+H)
1539	H ₃ C-O NO ₂	634 (M+H)
1540	HO CI	593 (M+H)
1541	HO CI	627 (M+H)

Table 173

Table 173			
Ex. No.	Formula	MS	
1542	HO HO HO	627 (M+H)	
1543	HO N	560 (M+H)	
1544	HO CHI	634 (M+H)	
1545	HO N N N N N N N N N N N N N N N N N N N	593 (M+H)	

Table 174

Table 174				
Ex. No.	Formula	MS		
1546	HO THE CI	627 (M+H)		
1547	HO N N N N N N N N N N N N N N N N N N N	627 (M+H)		
1548	HO N	560 (M+H)		
1549	HO NO ₂ O-CH ₃	634 (M+H)		

Table 175

Table 1/5			
Ex. No.	Formula	MS	
1550	HO CI	627 (M+H)	
1551	HO THO THOUSE THE PARTY OF THE	560 (M+H)	
1552	HO HO	532 (M+H)	
1553	HO HO	565 (M+H)	

Table 176

Table 176			
Ex. No.	Formula	MS	
1554	HO HO HO	599 (M+H)	
1555	HO HO	599 (M+H)	
1556	HO HO HO	532 (M+H)	
1557	HO H	532 (M+H)	

Table 177

Table 1//				
Ex. No.	Formula	MS		
1558	F-FF HONDON	584 (M+H)		
1559	F-FF HONN	570 (M+H)		

Table 178

	11011	-	WOW and large and
Ex.	HCV polymerase	Ex.	HCV polymerase
No.	inhibitoryactivity	No.	inhibitoryactivity
	IC ₅₀ [μM]		IC ₅₀ [μM]
2	0. 079	67	0. 26
6	0. 034	68	0. 28
9	0. 019	70	0. 19
11	0. 53	71	0. 62
12	0. 60	77	0. 51
17	0. 047	81	0. 18
20	0.042	82	0.097
26	0. 033	83	0. 52
- 30	0. 052	85	0. 17
43	0. 58	86	0. 13
44	0. 95	87	0.80
45	0.40	88	0. 092
46	0.47	89	0. 34
47	0. 54	90	0. 20
48	0.44	91	0. 53
49	0. 94	93	0. 16
50	0. 54	94	0. 084
51	1.0	96	0. 25
54	0. 56	97	0. 16
55	0. 36	98	0. 30

Table 179

Ex. No.	HCV polymerase inhibitory activity IC50 [µM]	Ex. No.	HCV polymerase inhibitory activity IC50 [µM]
99	0. 53	120	0. 16
100	0. 78	121	0. 19
101	0. 14	122	0.51
103	0. 17	123	0. 10
104	0. 073	124	0. 091
105	0. 076	125	0. 12
106	0. 40	128	0. 14
107	0. 11	129	0. 12
108	0. 21	130	0. 16
109	0. 11	131	0. 046
110	0. 24	132	0. 055
111	0. 14	133	0. 12
112	0. 11	134	0. 071
113	0. 071	139	0. 26
114	0. 56	140	0. 11
115	0. 17	141	0.43
116	0. 37	142	0. 055
117	0. 075	143	0. 053
118	0. 14	144	0. 19
119	0. 13	145	0. 088

Table 180

Ex.	HCV polymerase	Ex.	HCV polymerase
No.	inhibitory activity	No.	inhibitoryactivity
	IC ₅₀ [μM]		IC ₅₀ [μM]
146	0. 043	167	0. 033
147	0.31	168	0. 078
148	0. 038	169	0. 15
149	0. 15	170	0. 048
150	0. 24	171	0. 050
151	0. 20	172	0. 10
153	0. 19	173	0. 14
154	0. 076	174	0. 030
155	0. 53	175	0. 29
156	0. 23	176	0. 053
157	0. 16	177	0. 077
158	0. 11	178	0. 052
159	0. 13	179	0. 63
160	0. 24	180	0. 11
161	0. 062	181	0. 71
162	0.43	182	0. 021
163	0. 15	183	0. 017
164	0. 16	184	0. 018
165	0. 58	185	0. 11
166	0. 055	186	0. 37

Table 181

Ex.	HCV polymerase inhibitory activity	Ex.	HCV polymerase inhibitory activity
NO.	IC ₅₀ [μM]	NO.	IC ₅₀ [µM]
187	0. 056	207	0.081
188	0. 038	208	0. 039
189	0. 017	209	0. 12
190	0. 020	210	0. 31
191	0. 43	211	0. 059
192	0. 22	212	0. 23
193	0. 13	213	0. 10
194	0. 52	214	0. 059
195	0. 023	215	0. 078
196	0. 20	216	0.084
197	0. 11	217	0. 058
198	0.044	218	0. 033
199	0. 11	219	0. 13
200	0. 10	220	0.073
201	0. 14	221	0. 058
202	0. 095	222	0.041
203	0.063	223	0. 21
204	0. 16	225	0.014
205	0. 077	227	0. 045
206	0. 05	228	0. 18

Table 182

T. s.c.	HCV polymerase	Ex.	HCV polymerase
Ex.	inhibitory activity	No.	inhibitory activity
No.	IC ₅₀ [μM]	NO.	IC ₅₀ [μM]
000		057	
229	0. 022	257	0. 074
230	0. 17	259	0. 10
231	0. 073	260	0. 27
232	0. 015	262	0. 013
233	0. 028	263	0. 035
234	0. 022	264	<0.01
235	0. 036	265	0.014
236	0. 075	266	0.018
237	0.015	267	0.014
238	0. 19	268	0.012
239	0. 17	269	0. 013
240	0. 055	270	0. 012
248	0. 012	271	0.024
249	0. 022	272	0.066
250	0.018	273	0.041
252	0. 32	276	0. 023
253	0. 65	279	0. 017
254	0. 038	280	0.016
255	0. 038	281	0. 052
256	0. 079	282	0. 019

Table 183

Ex.	HCV polymerase inhibitory activity IC50 [µM]	Ex. No.	HCV polymerase inhibitory activity IC50 [µM]
283	0.014	300	0. 045
284	0.014	301	0. 017
285	0.012	303	0. 10
286	0. 014	304	0. 017
287	0. 012	305	0.01
288	0. 013	306	0.013
289	<0.01	307	0. 022
290	0.012	308	0. 023
291	0.016	311	0.16
292	0.015	312	0. 023
293	0. 034	313	0. 025
294	0. 032	314	0. 097
295	0.045	315	0. 028
296	0.034	316	0. 022
297	0. 022	317	0. 032
298	0. 011	318	0. 012
299	0. 018	319	0. 030

Table 184

Ex. No.	HCV polymerase inhibitoryactivity IC ₅₀ [µM]	Ex. No.	HCV polymerase inhibitoryactivity IC50 [µM]
320	0. 036	328	0. 015
321	0. 015	329	0. 047
322	0. 016	330	0. 011
323	0. 018	331	0. 017
324	0. 027	332	0. 023
325	0. 019	333	0. 016
326	0. 018	334	0. 016
327	0. 019	335	0. 013

Table 185

Example No.	249	1H NMR(δ) ppm
O HO N O	H 0 = N 0 = 0	300MHz, DMSO-d6 8. 02 (1H, d, J=1.5Hz), 8. 11 (1H, d, J=1.8Hz), 7. 96-7. 81 (3H, m), 7. 67 (1H, s), 7. 61-7. 49 (6H, m), 7. 08 (2H, d, J=8.6 Hz), 5. 19 (2H, s), 4. 25 (1H, m), 2. 38-2. 17 (2H, m), 1. 96-1 . 78 (4H, m), 1. 70-1. 56 (1H, m), 1. 46-1. 16 (3H, m), 1. 11 (9 H, s)
Purity > 90% (NM	AR)	
MS 672 (M+1)		

Example No.	250	1H NMR(δ) ppm
O HO F F N N		300MHz, DMSO-d6 8. 25 (1H, d, J=1. 5Hz), 8. 16- 8. 08 (2H, m), 7. 99-7. 88 (2H, m), 7. 66 (2H, d, J=8. 6Hz), 7. 60-7. 48 (5H, m), 7. 19 (2H, d, J=8. 6Hz), 5. 17 (2H, s), 4. 31 (1H, m), 2. 39-2. 20 (2H, m), 2 . 04-1. 79 (4H, m), 1. 72-1. 60 (1H, m), 1. 50-1. 18 (3H, m)
Purity >90%	(NMR)	
MS 616	(M+1)	

Example No.	251	1H NMR(δ) ppm
HCI HO N	≻ •• <u> </u>	300MHz, DMSO-d6 cis and trans mixture 8.13and8.11(total 1H, each s), 7.90-7.74(2H, m), 7.42- 7.22(5H, m), 4.56and4.52(t otal 2H, each s), 4.42(1H, brs), 3.78-3.0 6(2H, m) 2.33-1.33(18H, m)
Purity > 90%	(NMR)	
MS 433 (M+1)	

Table 186

Example No.	252	1H NMR(δ) ppm
HO N S O		300MHz, DMSO-d6 8. 20 (1H, d, J=1.5Hz), 7. 96 (1H, d, J=8.6Hz), 7. 84 (1H, dd , J=8.6, 1.5Hz), 7. 54 (2H, d, J=6.9Hz), 7. 48-7. 26 (8H, m) , 7. 09 (1H, t, J=7.3Hz), 5. 43 (2H, s), 4. 06 (1H, m), 2. 40-2 . 20 (2H, m), 2. 01-1. 80 (4H, m), 1. 75-1. 64 (1H, m), 1. 51-1 . 28 (3H, m)
Purity >90% (NMR)		
MS 509 (M+1)		

Example No.	253	1H NMR(δ) ppm
HO NO		300MHz, DMSO-d6 8. 21 (1H, d, J=1. 5Hz), 7. 93 (1H, d, J=8. 7Hz), 7. 85 (1H, dd , J=8. 4, 1. 5Hz), 7. 54-7. 47 (2H, m), 7. 40-7. 24 (6H, m), 7. 15 (1H, d, J=3. 6Hz), 7. 11-7. 05 (1H, m), 6. 81 (1H, d, J=3. 6 Hz), 5. 26 (2H, s), 4. 96 (1H, m), 2. 32-2. 13 (2H, m), 1. 95-1 . 72 (4H, m), 1. 68-1. 55 (1H, m
Purity > 9 0 % (NM	IR)), 1. 43-1. 18 (3H, m)
MS 493 (M+1)		

Example No.	254	1H NMR(δ) ppm
HO N S	N V OH	300MHz, DMSO-d6 8. 25 (1H, s), 8. 02 (1H, d, J=8 . 7Hz), 7. 90 (1H, dd, J=8. 4, 1 . 4Hz), 7. 80-7. 71 (2H, m), 7. 67 (2H, d, J=8. 7Hz), 7. 33 (2H , t, J=8. 7Hz), 7. 26 (2H, d, J= 8. 7Hz), 5. 46 (2H, s), 4. 78 (2 H, s), 4. 31 (1H, m), 2. 39-2. 1 9 (2H, m), 2. 03-1. 79 (4H, m), 1. 71-1. 59 (1H, m), 1. 50-1. 1
Purity > 90% (NMR)		7 (3H, m)
MS 558 (M+1)		

Table 187

Example No.	255	1H NMR(δ) ppm
HCI O HO N	O OH O N	300MHz, DMSO-d6 8. 34 (1H, s), 8. 32 (1H, d, J=8 .8Hz), 8. 09-8. 03 (3H, m), 7. 83 (2H, d, J=8. 3Hz), 7. 79 (2H ,d, J=8. 8Hz), 7. 36 (2H, d, J= 8. 8Hz), 5. 54 (2H, s), 4. 38 (1 H, m), 2. 74 (3H, s), 2. 40-2. 1 8 (2H, m), 2. 13-1. 96 (2H, m), 1. 93-1. 78 (2H, m), 1. 73-1. 5 7 (1H, m), 1. 55-1. 15 (3H, m)
Purity > 90% (NMR)	
MS 568 (M	(+1)	

Example No.	256	1H NMR(δ) ppm
HO N F O F	F О	300MHz, DMSO-d6 12.67(1H, brs), 8.23(1H, s), 7.94and7.87(2H, ABq, J=8.6Hz), 7.79(1H, dd, J=8.7, 5.4Hz), 7.62-7.41(7H, m), 6.80(1H, dd, J=11.9, 2.3Hz), 6.69(1H, dd, J=8.1, 2.1Hz), 5.20(2H, s), 3.93(1H, brt, J=15.3Hz), 2.30-2.11(2H, brm), 1.88-1.74(4H, brm), 1.64-1
Purity > 90% (NMF	₹)	.58(1H, brm), 1.41-1.14(3H , brm)
MS 585 (M+1)		

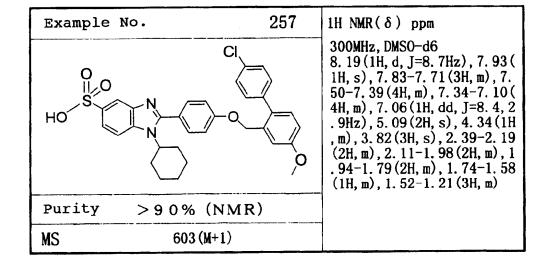


Table 188

Example No.	258	1H NMR(δ) ppm
CI N HOOO	ò	300MHz, DMSO-d6 7. 79 (1H, d, J=6. 7Hz), 7. 56 (1H, d, J=7. 5Hz), 7. 49 (2H, d, J=8. 6Hz), 7. 42 (4H, s), 7. 32 -7. 23 (3H, m), 7. 09-7. 03 (3H, m), 5. 02 (2H, s), 4. 46 (1H, m), 3. 82 (3H, s), 1. 95-1. 83 (2H, m), 1. 75-1. 44 (5H, m), 1. 3 0-1. 10 (2H, m), 0. 89-0. 71 (1H, m)
Purity > 9 0% (NMR)		
MS 567 (M+1)		

Example No.	259	1H NMR(δ) ppm
2HCI HO N O N O N O N O N O N O N O N O N O	√N	300MHz, DMSO-d6 8. 93 (2H, d, J=6. 6Hz), 8. 36 (1H, s), 8. 28 (1H, d, J=8. 7Hz), 8. 10-8. 03 (3H, m), 7. 85 (2H, d, J=8. 7Hz), 7. 23 (1H, s), 7. 23 (1H, s), 6. 81 (1H, s), 5. 56 (2H, s), 4. 39 (1H, m), 2. 97, 2. 92 (6H, s), 2. 40-2. 18 (2H, m), 2. 16-1. 95 (2H, m), 1. 90-1. 75 (2H, m), 1. 90 (2H, m), 1. 90 (2H, m), 1. 90 (2H, m), 1. 90 (2H,
Purity > 9 0% (NMR)		2H, m), 1.70-1.55(1H, m), 1. 50-1.15(3H, m)
MS 591 (M+1)		

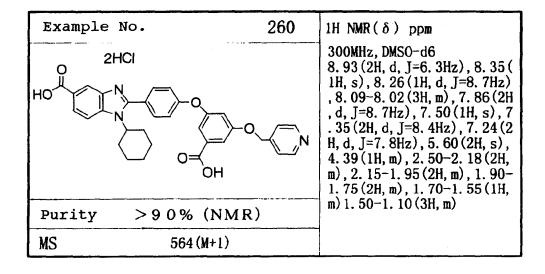


Table 189

Example No.	261	1H NMR(δ) ppm
HOO	CI	300MHz, DMSO-d6 8. 22 (1H, d, J=7.8Hz), 7.85 (1H, d, J=6.7Hz), 7.63 (2H, d, J=9.0H), 7.51-7.38 (5H, m), 7.29 (1H, d, J=8.3Hz), 7.23 (1H, d, J=3.0Hz), 7.06 (2H, d, J=9.0Hz), 7.06 (1H, dd, J=8.6, 3.0Hz), 5.05 (2H, s), 4.41 (-4.25 (1H, m), 3.83 (3H, s), 2.40-2.20 (2H, m), 2.03-1.78
Purity > 90%	(NMR)	(4H, m), 1.72-1.57(1H, m), 1 .50-1.18(3H, m)
MS 567	(M+1)	

Example No.	262	1H NMR(δ) ppm
HO N O HC	NH ₂	300MHz, DMSO-d6 8. 29 (1H, d, J=1.5Hz), 8. 26 (1H, d, J=9.0Hz), 8. 19 (1H, d, J=1.8Hz), 8. 13 (1H, brs), 8. 08-7.96 (2H, m), 7. 73 (2H, d, J=9.0Hz), 7. 57-7. 43 (6H, m), 7. 24 (2H, d, J=9.0Hz), 5. 14 (2H, s), 4. 36 (1H, m), 2. 38-2 .18 (2H, m), 2. 12-1.97 (2H, m), 1. 93-1.80 (2H, m), 1. 73-1
Purity > 90% (N	MR)	.58(1H, m), 1.52-1.20(3H, m)
MS 580 (M+1)	

Example No.	263	1H NMR(δ) ppm
HO-	ON	300MHz, DMSO-d6 12.85(1H, brs), 8.72(1H, d, J=4.8Hz), 8.22(1H, s), 8.14 (1H, d, J=6.3Hz), 8.03and7. 76(4H, ABq, J=8.6Hz), 7.93a nd7.85(2H, A'B'q, J=8.6Hz), 7.60and7.15(4H, A"B"q, J= 8.7Hz), 7.55(1H, dd, J=6.3, 4.8Hz), 5.19(2H, s), 4.26(1 H, brt, J=12.6Hz), 2.35-2.1
Purity > 90% (N)	MR)	8(2H, brm), 1.95-1.77(4H, b rm), 1.70-1.60(1H, brm), 1.
MS 548 (M+1)		45-1.15(3H, brm)

Table 190

Example No.	264	1H NMR(δ) ppm
HO N O		300MHz, DMSO-d6 8. 23 (1H, d, J=1. 0Hz), 7. 92 (1H, dd, J=8. 7, 1. 0Hz), 7. 87 (1H, d, J=8. 7Hz), 7. 60 (2H, d, J=8. 6Hz), 7. 47 (2H, d, J=8. 7 Hz), 7. 44 (2H, d, J=8. 7 Hz), 7. 30 (1H, d, J=8. 3Hz), 7. 23 (1 H, d, J=2. 6Hz), 7. 11 (2H, d, J=8. 7 Hz), 7. 06 (1H, dd, J=8. 7 , 2. 6Hz), 5. 04 (2H, s), 4. 36 (4H, d), 3
Purity > 90% (NM)	R)	1H, m), 3. 83 (3H, s), 2. 80-2. 70 (4H, m), 2. 60-2. 40 (2H, m)
MS 586, 588 (M+1)		, 2. 30-2. 20 (2H, m)

Example No. 265	1H NMR(δ) ppm
CI HO HCI ON	300MHz, DMSO-d6 8. 30 (1H, d, J=1.5Hz), 8. 25 (1H, d, J=9.1Hz), 8. 03 (1H, dd , J=8.7, 1.5Hz), 7. 76-7.96 (3H, m), 7. 55-7. 49 (5H, m), 7. 42 (1H, d, J=7.6Hz), 7. 23 (2H , d, J=8.7Hz), 5. 15 (2H, s), 4 . 35 (1H, m), 3. 01 (3H, s), 2. 9 7 (3H, s), 2. 37-2. 20 (2H, m), 2. 09-1. 97 (2H, m), 1. 94-1. 8
Purity > 90% (NMR)	1 (2H, m), 1.72-1.60 (1H, m), 1.50-1.21 (3H, m)
MS 608 (M+1)	

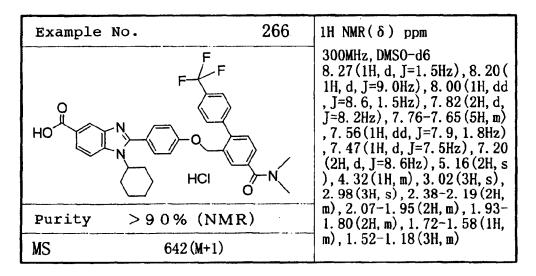
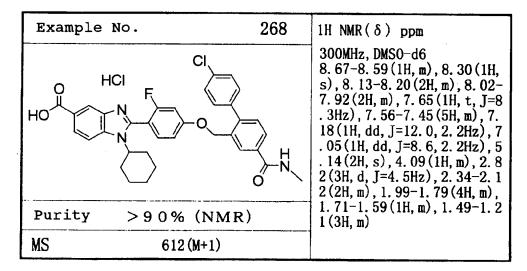


Table 191

Example No.	267	1H NMR(δ) ppm
HO N HCI		300MHz, DMSO-d6 8. 34 (2H, m), 8. 03 (1H, d, J=8 .3Hz), 7. 77-7. 68 (3H, m), 7. 54-7. 40 (4H, m), 7. 33 (2H, d, J=8. 6Hz), 7. 24 (2H, d, J=9. 0 Hz), 5. 16 (2H, s), 4. 36 (1H, m), 3. 01 (3H, s), 2. 97 (3H, s), 2. 40-2. 20 (2H, m), 2. 11-1. 9 7 (2H, m), 1. 93-1. 81 (2H, m), 1. 71-1. 60 (1H, m), 1. 50-1. 2
Purity > 90% (NMR))	1 (3H, m)
MS 620 (M+1)		



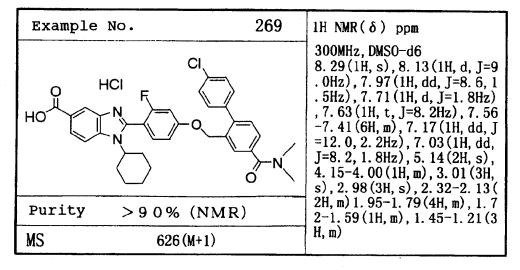


Table 192

Example No.	270	1H NMR(δ) ppm
HCI CI N F O	\sim	300MHz, DMSO-d6 8. 24 (1H, d, J=1. 4Hz), 8. 19 (1H, d, J=1. 8Hz), 8. 11 (1H, br s), 8. 02-7. 85 (3H, m), 7. 60- 7. 44 (7H, m), 7. 10 (1H, dd, J= 12. 0, 2. 1Hz), 6. 98 (1H, dd, J= 8. 4, 2. 1Hz), 5. 11 (2H, s), 3 . 98 (1H, m), 2. 30-2. 12 (2H, m), 1. 91-1. 73 (4H, m), 1. 71-1 . 58 (1H, m), 1. 45-1. 15 (3H, m)
Purity > 90% (N	MR))
MS 598 (M+1)	

Example No. 271	1H NMR(δ) ppm
HCI HO N N N N	300MHz, DMSO-d6 8. 29 (1H, d, J=1. 5Hz), 8. 24 (1H, d, J=8. 7Hz), 8. 07-7. 98 (3H, m), 7. 80-7. 68 (5H, m), 7. 56 (1H, dd, J=8. 0, 1. 8Hz), 7. 47 (1H, d, J=8. 0Hz), 7. 21 (2H, d, J=8. 4Hz), 5. 18 (2H, s), 4. . 34 (1H, m), 3. 27 (3H, s), 3. 0 2 (3H, s), 2. 98 (3H, s), 2. 38- 2. 18 (2H, m), 2. 10-1. 95 (2H,
Purity > 90% (NMR)	m), 1.93-1.79(2H, m), 1.72- 1.59(1H, m), 1.50-1.19(3H,
MS 652 (M+1)	m)

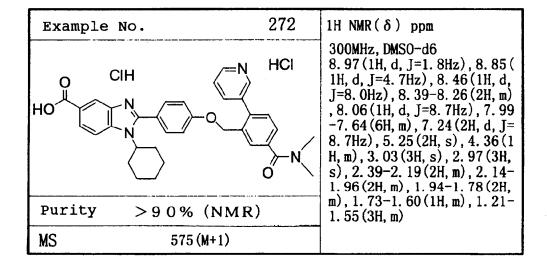
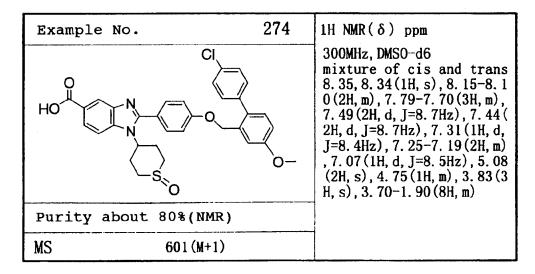


Table 193

Example No.	273	1H NMR(δ) ppm
HO NO	N N	300MHz, DMSO-d6 8. 30 (1H, s), 8. 27 (1H, d, J=8 .7Hz), 8. 05 (1H, d, J=8. 7Hz) ,7. 77-7. 67 (3H, m). 7. 58-7. 48 (6H, m), 7. 22 (2H, d, J=8. 4 Hz), 5. 18 (2H, s), 4. 35 (1H, b rt, J=9. 8Hz), 3. 06-2. 88 (12 H, brm), 2. 38-2. 20 (2H, brm) ,2. 08-1. 96 (2H, brm), 1. 90- 1. 80 (2H, brm), 1. 70-1. 60 (1
Purity > 90% (NM)	₹)	H, brm), 1.49-1.22(3H, brm)
MS 645 (M+1)		



Example No.	275	1H NMR(δ) ppm
HO N O	0-	300MHz, DMSO-d6 8. 33 (1H, s), 8. 13 (1H, d, J=7 .5Hz), 7. 93 (1H, d, J=8. 8Hz) ,7. 74 (2H, d, J=8. 7Hz), 7. 49 (2H, d, J=8. 6Hz), 7. 44 (2H, d ,J=8. 6Hz), 7. 31 (1H, d, J=8. 5Hz), 7. 25-7. 15 (3H, m), 7. 0 7 (1H, d, J=8. 5Hz), 5. 08 (2H, s), 4. 98 (1H, m), 3. 83 (3H, s) ,3. 65-3. 45 (2H, m), 3. 30-3.
Purity > 90% (N	MR)	10 (2H, m), 3. 00-2. 75 (2H, m) , 2. 60-2. 30 (2H, m)
MS 617 (M+1)	

Table 194

Example No. 276	1H NMR(δ) ppm
HO N F O S	300MHz, DMSO-d6 8. 25 (1H, s), 7. 93and7. 87 (2 H, ABq, J=9. 1Hz), 7. 55 (1H, t , J=8. 6Hz), 7. 48and7. 42 (4H , A' B' q, J=8. 6Hz), 7. 31 (1H, d, J=8. 5Hz), 7. 24 (1H, d, J=2 . 6Hz), 7. 09-6. 95 (3H, m), 5. 05 (2H, s), 4. 11 (1H, brt, J=1 4. 0Hz), 3. 84 (3H, s), 2. 83-2 . 67 (4H, brm), 2. 50-2. 32 (2H
Purity > 90% (NMR)	, brm), 2. 21-2. 10 (2H, brm)
MS 603 (M+1)	

Example No.	277	1H NMR(δ) ppm
HO N F O		300MHz, DMSO-d6 cis and trans mixture 8.28and8.24(total 1H, each s), 7.94-7.87(1H, m), 7.60- 7.41(5H, m), 7.31(1H, d, J=8 .5Hz), 7.23-7.21(1H, m), 7. 12-7.05(2H, m), 7.00-6.95(1H, m), 5.06and5.05(total 2H, each
Purity > 90% (NM)	R)	s), 4. 47and4. 34 (total 1H, each
MS 619(M+1)		brs), 3.83(3H, s), 3.12-1.7 6(8H, m)

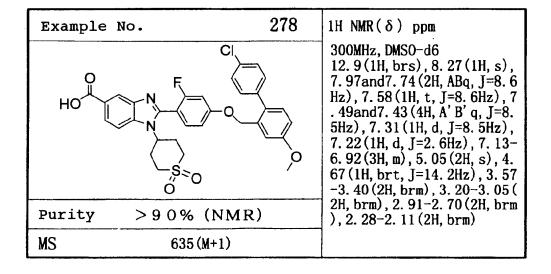


Table 195

Example No.	279	1H NMR(δ) ppm
HCI HO N		300MHz, DMSO-d6 8. 30 (1H, s), 8. 23 (1H, d, J=8 . 7Hz), 8. 06-8. 00 (2H, m), 7. 83 (1H, dd, J=8. 0, 1. 8Hz), 7. 71 (2H, d, J=8. 4Hz), 7. 64 (1H , d, J=8. 0Hz), 7. 59-7. 54 (4H , m), 7. 22 (2H, d, J=8. 4Hz), 5 . 25 (2H, s), 4. 33 (1H, m), 2. 6 6 (3H, s), 2. 66 (3H, s), 2. 37- 2. 19 (2H, m), 1. 93-1. 80 (2H,
Purity > 9 0 %	(NMR)	m), 1.70-1.59(1H, m), 1.47- 1.21(3H, m)
MS 644	(M+1)	_

Example No.	280	1H NMR(δ) ppm
HCI HO N	CI	300MHz, DMSO-d6 8. 32-8. 23 (3H, m), 8. 08-8. 0 1 (2H, m), 7. 73 (2H, d, J=8. 6H z), 7. 65 (1H, d, J=8. 2Hz), 7. 59-7. 51 (4H, m), 7. 25 (2H, d, J=8. 6Hz), 5. 21 (2H, s), 4. 34 (1H, m), 3. 32 (3H, s), 2. 37-2 . 19 (2H, m), 2. 10-1. 98 (2H, m), 1. 93-1. 80 (2H, m), 1. 71-1 . 60 (1H, m), 1. 51-1. 21 (3H, m
Purity > 9 0 %	(NMR))
MS 615	(M+1)	

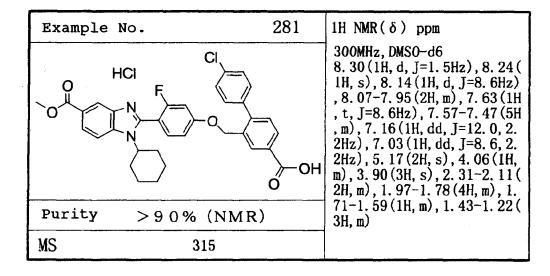


Table 196

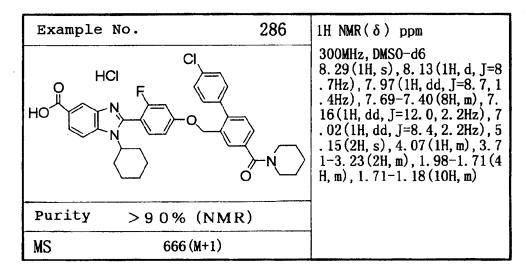
Example No.	282	1H NMR(δ) ppm
HCI HO N	CIH	300MHz, DMSO-d6 8. 36 (1H, s), 8. 35 (1H, d, J=9 .3Hz), 8. 09 (1H, d, J=9. 3Hz) ,7. 78 (2H, d, J=8. 7Hz), 7. 48 -7. 25 (9H, m), 5. 09 (2H, s), 4 .39 (1H, m), 3. 04 (6H, s), 2. 4 0-2. 15 (2H, m), 2. 10-1. 95 (2 H, m), 1. 90-1. 75 (2H, m), 1. 7 0-1. 55 (1H, m), 1. 50-1. 20 (3 H, m)
Purity > 9 0 %	(NMR)	
MS 580 (M+1)	

Example	No.	283	1H NMR(δ) ppm
но	HCI CI	0 s=0	300MHz, DMSO-d6 10.03(1H, s), 8.33(1H, s), 8 .29(1H, d, J=8.7Hz), 8.06(1 H, d, J=9.0Hz), 7.74(2H, d, J =9.0Hz), 7.51-7.42(5H, m), 7.37-7.30(2H, m), 7.22(2H, d, J=8.7Hz), 5.10(2H, s), 4. 37(1H, m), 3.06(3H, s), 2.40 -2.18(2H, m), 2.15-1.95(2H, m), 1.90-1.80(2H, m), 1.75
Purity	>90% (NMR)		-1.55(1H, m), 1.50-1.20(3H, m)
MS	630 (M+1)		

Example No.	284	1H NMR(δ) ppm
HCI CI HO N F		300MHz, DMSO-d6 8. 30 (1H, s), 8. 14 (1H, d, J=8 . 7Hz), 7. 97 (1H, d, J=8. 7Hz) , 7. 96-7. 41 (8H, m), 7. 16 (1H , dd, J=12. 4, 2. 2Hz), 7. 03 (1 H, dd, J=8. 4, 2. 2Hz), 5. 15 (2 H, s), 4. 15 (1H, m), 3. 54-3. 1 6 (4H, m), 2. 33-2. 13 (2H, m), 1. 97-1. 79 (4H, m), 1. 70-1. 0 2 (9H, m)
Purity > 90% (NMR)		
MS 654 (M+1)		

Table 197

Example No.	285	1H NMR(δ) ppm
HCI N N		300MHz, DMSO-d6 8. 37 (1H, d, J=7. 3Hz), 8. 30 (1H, s), 8. 19-8. 12 (2H, m), 8. 02-7. 95 (2H, m), 7. 65 (1H, t, J=8. 4Hz), 7. 56-7. 43 (5H, m), 7. 18 (1H, dd, J=12. 0, 1. 8Hz), 7. 06 (1H, dd, J=8. 4, 2. 1Hz), 5. 13 (2H, s), 4. 22-4. 03 (2H, m), 2. 34-2. 13 (2H, m), 1. 99-1. 78 (4H, m), 1. 72-1. 57 (1
Purity > 90%	(NMR)	H, m), 1.44-1.14(3H, m), 1.2 0, 1.18(6H, each s)
MS 640	(M+1)	



Example No.	287	1H NMR(δ) ppm
HCI F N N N N N N N N N N N N N N N N N N		300MHz, DMSO-d6 8. 29 (1H, s), 8. 13 (1H, d, J=8 . 0Hz), 7. 97 (1H, d, J=8. 4Hz) , 7. 83 (1H, s), 7. 68-7. 41 (7H , m), 7. 17 (1H, d, J=12. 0Hz), 7. 03 (1H, d, J=8. 4Hz), 5. 15 (2H, s), 4. 07 (1H, m), 3. 58-3. 41 (4H, m), 2. 34-2. 13 (2H, m) ,1. 97-1. 77 (8H, m), 1. 71-1. 58 (1H, m), 1. 49-1. 18 (3H, m)
Purity > 90% (NM)	R)	
MS 652 (M+1)		

Table 198

Example No.	288	1H NMR(δ) ppm
HCI F O F		300MHz, DMSO-d6 8. 62 (1N, m), 8. 31 (1H, s), 8. 22-8. 14 (2H, m), 8. 99 (2H, d, J=8. 7Hz), 7. 66 (1H, t, J=7. 7 Hz), 7. 58-7. 44 (5H, m), 7. 19 (1H, dd, J=8. 7, 2. 2Hz), 5. 14 (2H, s), 4. 11 (1H, m), 3. 67-3 . 49 (2H, m), 3. 45-3. 30 (2H, m)), 2. 37-2. 12 (2H, m), 2. 00-1 . 76 (4H, m), 1. 70-1. 58 (1H, m)
Purity > 90% (N	IMR)), 1. 48-1. 17 (3H, m)
MS 642 (M+	1)	

Example No.	289	1H NMR(δ) ppm
HCI F O	()−он	400MHz, DMSO-d6 8. 28 (1H, s), 8. 11 (1H, d, J=8 .9Hz), 7. 96 (1H, d, J=8. 9Hz) , 7. 68 (1H, s), 7. 62 (1H, t, J= 8. 2Hz), 7. 55-7. 41 (6H, m), 7 .15 (1H, d, J=11. 7Hz), 7. 02 (1H, d, J=8. 4Hz), 5. 14 (2H, s) , 4. 12-3. 13 (6H, m), 2. 30-1. 19 (13H, m)
Purity > 90% (NMR)	
MS 682 (M+1)		

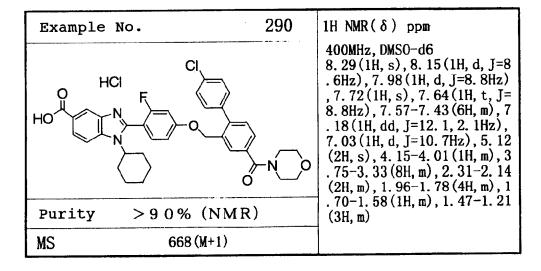


Table 199

Example No.	291	1H NMR(δ) ppm
HCI F O		400MHz, DMSO-d6 8. 29 (1H, s), 8. 14 (1H, d, J=8 .9Hz), 7. 97 (1H, d, J=8. 6Hz) , 7. 71 (1H, s), 7. 63 (1H, t, J= 8. 2Hz), 7. 56-7. 42 (6H, m), 7 .17 (1H, d, J=12. 3Hz), 7. 03 (1H, d, J=10. 7Hz), 5. 14 (2H, s), 4. 07 (1H, m), 3. 96-3. 52 (4 H, m), 2. 79-2. 56 (4H, m), 2. 3 2-2. 14 (2H, m), 1. 97-1. 79 (4
Purity > 9 0 % (NMR)		H, m), 1.71-1.58(1H, m), 1.5 1-1.19(3H, m)
MS 684 (M+	1)	

Example No.	292	1H NMR(δ) ppm
HCI F O	DHZ OOH	300MHz, DMSO-d6 9.07-8.99(1H, m), 8.30(1H, s), 8.23-8.12(2H, m), 8.04-7.95(2H, m), 7.65(1H, t, J=8.2Hz), 7.60-7.45(5H, m), 7.19(1H, dd, J=12.0, 2.6Hz), 7.06(1H, dd, J=8.6, 2.2Hz), 5.16(2H, s), 4.18-4.02(1H, m), 3.97(2H, d, J=6.0Hz), 2.33-2.14(2H, m), 1.99-1.79(4
Purity > 90% ((NMR)	H, m), 1.72-1.59(1H, m), 1.4 5-1.19(3H, m)
MS 656 (M	[+1)	

Example No.	293	1H NMR(δ) ppm
HO N	OH CI	300MHz, DMSO-d6:8.21(1H, s), 7.94and7.86(2H, ABq, J=8.6Hz), 7.72(1H, d, J=2.4Hz), 7.59and7.11(4H, A'B'q, J=8.9Hz), 7.36and7.32(4H, A'B''q, J=8.1Hz), 5.07(2H, s), 4.27(1H, brt, J=13.8Hz), 2.87(2H, t, J=7.8Hz), 2.57(2H, t, J=7.8Hz), 2.67(2H, t,
Purity > 90% ()	NMR)	7.8Hz), 2.35-2.20(2H, brm) , 1.96-1.79(4H, brm), 1.68-
MS 637 (M+	+1)	1.59(1H, brm), 1.47-1.18(3 H, brm)

Table 200

Example No.	294	1H NMR(δ) ppm
HCI HO N	OH -O	300MHz, DMSO-d6 8. 30 (1H, s), 8. 25and8. 03 (2 H, ABq, J=8. 9Hz), 7. 73 (1H, s), 7. 73 (2H, d, J=8. 6Hz), 7. 5 5 (1H, dd, J=8. 0, 2. 3Hz), 7. 4 0 (4H, s), 7. 39 (1H, d, J=8. 0Hz), 7. 23 (2H, d, J=8. 6Hz), 5. 11 (2H, s), 4. 55 (2H, s), 4. 36 (1H, brt, J=14. 8Hz), 2. 37-2 .19 (2H, brm), 2. 09-1. 96 (2H
Purity > 90% (NMR)		, brm), 1.91-1.79(2H, brm), 1.71-1.59(1H, brm), 1.50-1
MS 567 (M+	1)	. 20 (3H, brm)

Example No.	295	1H NMR(δ) ppm
HCI HO N	O- CI	300MHz, DMSO-d6 8. 30(1H, s), 8. 25and8. 04(2 H, ABq, J=8. 7Hz), 7. 74(1H, s), 7. 72(2H, d, J=8. 7Hz), 7. 5 6(1H, d, J=8. 7Hz), 7. 48-7. 3 5(5H, m), 7. 22(2H, d, J=8. 7Hz), 5. 11(2H, s), 4. 46(2H, s), 4. 35(1H, brt, J=14. 8Hz), 3 . 31(3H, s), 2. 37-2. 17(2H, brm), 2. 07-1. 95(2H, brm), 1.
Purity > 90% (1	NMR)	92-1.79(2H, brm), 1.73-1.5 6(1H, brm), 1.52-1.20(3H, b
MS 581 (M+	-1)	rm)

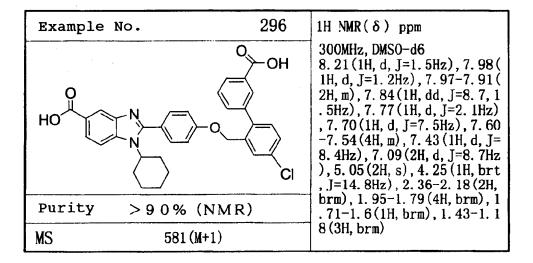


Table 201

Example No.	297	1H NMR(δ) ppm
CI O HO N O	S	300MHz, DMSO-d6 12.7(1H, brs), 8.21(1H, s), 7.94and7.85(2H, ABq, J=8.6 Hz), 7.60-7.55(3H, m), 7.49 and7.45(4H, A'B'q, J=8.3Hz), 7.12(2H, d, J=8.7Hz), 5.0 5(2H, s), 4.26(1H, brt, J=13 .0Hz), 2.54(3H, s), 2.38-2. 20(2H, brm), 1.97-1.80(4H, brm), 1.71-1.59(1H, brm), 1
Purity > 90% (NMR)		.47-1.20 (3H, brm)
MS 583 (M+1)		

Example No.	298	1H NMR(δ) ppm
HO N	S=0	300MHz, DMSO-d6 8. 22 (1H, s), 8. 01 (1H, s), 7. 95and7. 86 (2H, ABq, J=8. 6Hz), 7. 79 (1H, d, J=7. 8Hz), 7. 5 8 (3H, t, J=7. 5Hz), 7. 53 (4H, s), 7. 13 (2H, d, 8. 7Hz), 5. 15 (2H, s), 4. 26 (1H, brt, J=13. 8Hz), 2. 83 (3H, s), 2. 37-2. 1 8 (2H, brm), 1. 95-1. 78 (4H, brm), 1. 70-1. 59 (1H, brm), 1.
Purity > 90% (NMR)	47-1.17 (3H, brm)
MS 599 (M	+1)	

Example No.	299	1H NMR(δ) ppm
HCI CI HO N N N N N N N N N N N N N N N N N N	N	300MHz, DMSO-d6 8. 43-8. 16 (3H, m), 8. 07-7. 9 4 (2H, m), 7. 72 (2H, d, J=8. 6H z), 7. 62-7. 49 (5H, m), 7. 23 (2H, d, J=8. 6Hz), 5. 16 (2H, s) , 4. 34 (1H, m), 2. 39-2. 20 (2H , m), 2. 10-1. 96 (2H, m), 1. 93 -1. 80 (2H, m), 1. 71-1. 58 (1H , m), 1. 49-1. 19 (3H, m)
Purity >90% (NMR)	
MS 562 (M+1)		

Table 202

Example No.	300	1H NMR(δ) ppm
HO N F N	N	300MHz, DMSO-d6:2.77(1H, b rs), 8.83(2H, d, J=1.9Hz), 8.56(2H, dd, J=4.9, 1.9Hz), 8.22(1H, d, J=1.5Hz), 7.97(2 H, dt, J=7.9, 1.9Hz), 7.95(1 H, d, J=8.6Hz), 7.87(1H, dd, J=8.6, 1.5Hz), 7.57(1H, t, J=8.7Hz), 7.46(2H, dd, J=7.9, 4.9Hz), 7.26(1H, dd, J=12.0, 4.9Hz), 7.14(1H, dd, J=8.
Purity > 90% (NMR)		8,2.3Hz),6.99(2H,s),3.94 (1H,brt),2.26-2.09(2H,m)
MS 523 (M+1)		, 1. 87-1. 73 (4H, m), 1. 67-1. 57 (1H m) 1 42-1 12 (3H m)

Example No.	301	1H NMR(δ) ppm
HO N F O N N N N N N N N N N N N N N N N	>—(N−	300MHz, DMSO-d6 8. 22 (1H, s), 7. 95 (1H, d, J=8 .7Hz), 7. 87 (1H, dd, J=1. 5Hz ,9. 0Hz), 7. 62 (4H, d, J=8. 4H z), 7. 55 (1H, t, J=9. 0Hz), 7. 44 (4H, d, J=8. 1Hz), 7. 20 (1H ,dd, J=2. 1Hz, 12. 0Hz), 7. 11 (1H, dd, J=2. 1Hz, 8. 7Hz), 6. 86 (1H, s), 3. 94 (1H, m), 2. 96 ,2. 88 (12H, s), 2. 35-2. 00 (2
Purity > 90% (NMR)		H, m), 1.95-1.70(4H, m), 1.6 5-1.50(1H, m), 1.45-1.10(3
MS 663 (M+1)		Н, ш)

Example No.	302	1H NMR(δ) ppm
Na ⁺ O-N-N-O-N-N-N-N-N-N-N-N-N-N-N-N-N-N-N-N	>√ ^S	300MHz, DMSO-d6 8. 14 (1H, s), 7. 88 (1H, d, J=8 . 4Hz), 7. 68 (1H, d, J=8. 7Hz) , 7. 64-7. 55 (3H, m), 7. 50 (1H , t, J=8. 7Hz), 7. 22-7. 17 (3H , m), 7. 11 (1H, s), 7. 08-7. 00 (2H, m), 3. 90 (1H, m), 2. 15-2 . 00 (2H, m), 1. 95-1. 50 (5H, m), 1. 45-1. 00 (3H, m)
Purity >90% (NMR))	
MS 532 (M+1)		

Table 203

Example No.	303	1H NMR(δ) ppm
O F CI) N	300MHz, CDC13 8. 49 (1H, s), 7. 98 (1H, dd, J= 8. 6, 1. 5Hz), 7. 71 (1H, d, J=1 .8Hz), 7. 66 (1H, d, J=8. 6Hz) , 7. 55-7. 29 (7H, m), 6. 80 (1H , dd, J=8. 2, 2. 2Hz), 6. 69 (1H , dd, J=11. 2, 2. 2Hz), 4. 99 (2 H, s), 4. 10-3. 92 (1H, m), 3. 9 5 (3H, s), 3. 15 (3H, s), 3. 06 (3H, s), 2. 31-2. 14 (2H, m), 2.
Purity > 90% (NMR)		04-1.86(4H, m), 1.81-1.71(1H, m), 1.41-1.21(3H, m)
MS 640 (M+1)		

Example No.	304	1H NMR(δ) ppm
O'Na ⁺) ————————————————————————————————————	300MHz, DMSO-d6 8. 21 (1H, s), 7. 94 (1H, d, J=8 .7Hz), 7. 84 (1H, d, J=9. 1Hz) , 7. 70 (1H, s), 7. 26-7. 39 (9H , m), 7. 11 (2H, d, J=8. 4Hz), 5 .11 (2H, s), 4. 26 (1H, m), 3. 0 1 (3H, s), 2. 97 (3H, s), 2. 38- 2. 19 (2H, m), 1. 97-1. 78 (4H, m), 1. 72-1. 57 (1H, m), 1. 48- 1. 17 (3H, m)
Purity >90% (NMR)		
MS 608 (M+1)		

Example No.	305	1H NMR(δ) ppm
HO N F	CI O O O O O	300MHz, DMSO-d6 8. 24 (2H. s), 8. 03 (1H, d, J=8 .0Hz), 7. 96 (1H, d, J=8. 8Hz) ,7. 87 (1H, d, J=9. 1Hz), 7. 60 -7. 46 (6H, m), 7. 09 (1H, dd, J =12. 0, 1. 8Hz), 6. 97 (1H, dd, J=8. 4, 1. 8Hz), 5. 16 (2H, s), 3. 97 (1H, m), 2. 31-2. 11 (2H, m), 1. 92-1. 73 (4H, m), 1. 70-1, 57 (1H, m), 1. 46-1. 13 (3H,
Purity > 90%	(NMR)	m)
MS 599 ((M+1)	

Table 204

Example No.	306	1H NMR(δ) ppm
HO HO		300MHz, DMSO-d6 12.84(1H, brs), 8.21(1H, s) ,7.98-7.84(5H, m), 7.58(2H, d, J=8.7Hz), 7.54(2H, d, J=7.8Hz), 7.34(1H, d, J=8.7Hz), 7.26(1H, d, J=2.4Hz), 7.13-7.06(3H, m), 5.06(2H, s) ,4.26(1H, brt, J=12.7Hz), 3.84(3H, s), 2.36-2.17(2H, brm), 1.99-1.80(4H, brm), 1.
Purity >90% (NMR)		73-1.59(1H, brm), 1.47-1.1 7(3H, brm)
MS 577 (M+1)		

Example No.	307	1H NMR(δ) ppm
H ₂ N-O		300MHz, DMSO-d6 8. 22 (1H, s), 8. 04 (1H, s), 7. 96 (2H, d, J=8. 1Hz), 7. 87 (2H, s), 7. 72 (1H, d, J=1. 2Hz), 7 .59-7. 41 (7H, m), 5. 12 (2H, s), 4. 25 (1H, brt, J=11. 8Hz), 3. 02 (3H, brs), 2. 98 (3H, brs), 2. 38-2. 15 (2H, brm), 1. 93 -1. 76 (4H, brm), 1. 71-1. 59 (1H, brm), 1. 46-1. 16 (3H, brm)
Purity > 90% (NM	R)	,
MS 617 (M+1)		

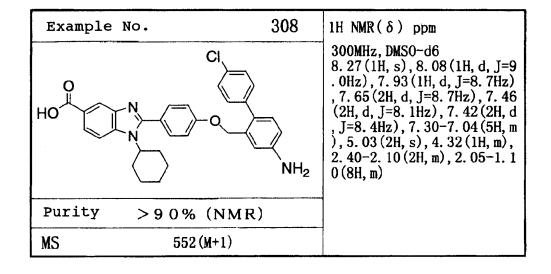


Table 205

Example No.	309	1H NMR(δ) ppm
O HCI HO N	O O C	300MHz, DMSO-d6 8. 33 (1H, s), 8. 15and7. 99 (2 H, ABq, J=8. 9Hz), 7. 84and7. 59 (4H, A'B'q, J=8. 3Hz), 7. 4 6 (2H, d, J=8. 4Hz), 7. 22-7. 1 6 (3H, m), 7. 01-6. 98 (2H, m), 4. 27and4. 23 (2H, A"B"q, J=1 2. 9Hz), 3. 78 (3H, s), 2. 39-2 . 21 (2H, brm), 2. 07-1. 95 (2H, brm), 1. 91-1. 80 (2H, brm),
Purity > 90% (NMR)	1.72-1.59(1H, brm), 1.49-1 .17(3H, brm)
MS		

Example No.	310	1H NMR(δ) ppm
O HCI	S=0 CI	300MHz, DMSO-d6 8. 33 (1H, s), 8. 09and7. 95 (2 H, ABq, J=8. 7Hz), 7. 87and7. 71 (4H, A'B'q, J=8. 0Hz), 7. 4 3 (2H, d, J=7. 8Hz), 7. 15 (1H, d, J=8. 7Hz), 7. 07-7. 02 (4H, m), 4. 66 (2H, s), 4. 23 (1H, br t, J=11. 8Hz), 3. 76 (3H, s), 2 . 38-2. 20 (2H, brm), 2. 04-1. 93 (2H, brm), 1. 89-1. 79 (2H,
Purity > 90%	(NMR)	brm), 1.70-1.59(1H, brm), 1 .49-1.18(3H, brm)
MS 61	5(M+1)	

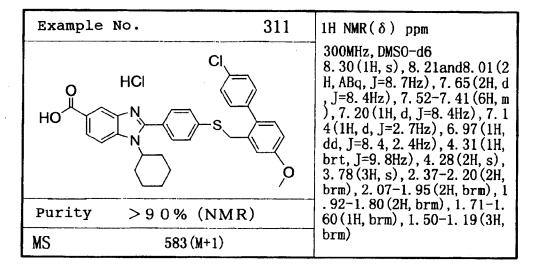


Table 206

Example No.	312	1H NMR(δ) ppm
HO N F O OH OH	ОН	300MHz, DMSO-d6 8. 22(1H, s), 8. 12(1H, d, J=8 . 4Hz), 8. 00-7. 84(5H, m), 7. 70(4H, d, J=8. 4Hz), 7. 56(1H , t, J=8. 6Hz), 7. 23(1H, d, J= 12. 0Hz), 7. 13(1H, d, J=8. 6H z), 6. 97(1H, s), 3. 92(1H, m) , 2. 35-2. 00(2H, m), 1. 95-1. 70(4H, m), 1. 65-1. 55(1H, m) , 1. 50-1. 05(3H, m)
Purity > 90% (N	MR)	
MS 609 (M+1)	

Example No. 31	3 1H NMR(δ) ppm
HO N F	300MHz, DMSO-d6 8. 89(1H, brs), 8. 63(1H, brs), 8. 24(1H, s), 8. 11(1H, d, J), 8. 24(1H, s), 8. 11(1H, d, J), 7. 89(1H, d, J=9. 9Hz), 7. 61-7. 55(4H, m), 7. 43(2H, t, J=7. 7Hz), 7. 34(1H, t, J=7. 2Hz), 7. 24(1H, d, J=12. 0Hz), 7. 14(1H, d, J=8. 6Hz), 6. 95(1H, s), 3. 96(1H, m), 2. 35-2.
Purity > 90% (NMR)	05 (2H, m), 2. 00-1. 50 (5H, m), 1. 45-1. 10 (3H, m)
MS 522 (M+1)	

Example No.	314	1H NMR(δ) ppm
O F	CI	300MHz, CDC13 8. 48 (1H, d, J=1. 4Hz), 8. 05 (1H, d, J=1. 8Hz), 8. 98 (1H, d, J=8. 6Hz), 7. 82 (1H, d, J=7. 9 Hz), 7. 66 (1H, d, J=8. 6Hz), 7 .55-7. 24 (6H, m), 6. 78 (1H, d d, J=8. 6, 2. 6Hz), 6. 69 (1H, d d, J=11. 6Hz), 2. 2Hz), 6. 40- 6. 30 (1H, m), 4. 99 (2H, s), 4. 02 (1H, m), 3. 95 (3H, s), 3. 05
Purity > 9 0 %	(NMR)	(3H, d, J=4.8Hz), 2.32-2.13 (2H, m), 2.03-1.87(4H, m), 1
MS 626	(M+1)	.81-1.71(1H,m),1.46-1.23 (3H,m)

Table 207

Example	No.	503	1H NMR(δ) ppm
но			300MHz, DMSO-d6 8. 23 (1H, s), 7. 76 (1H, d, J=8 . 7Hz), 7. 58 (1H, d, J=8. 8Hz) , 7. 51-7. 32 (7H, m), 7. 17 (2H , d, J=8. 7Hz), 6. 55 (1H, s), 5 . 18 (2H, s), 4. 75 (1H, m), 2. 3 5-2. 12 (2H, m), 2. 10-1. 85 (4 H, m), 1. 80-1. 50 (2H, m)
Purity	>90% (NMR)		•
MS	412 (M+1)		

Example No. 701	1H NMR(δ) ppm
HO N N O O O O	300MHz, DMSO-d6 8. 96 (1H, s), 8. 50 (1H, s), 7. 77 (2H, d, J=8. 7Hz), 7. 50-7. 40 (4H, m), 7. 30 (1H, d, J=8. 4 Hz), 7. 24 (1H, d, J=2. 4Hz), 7. .16 (2H, d, J=8. 4Hz), 7. 06 (1 H, dd, J=2. 4Hz, 8. 1Hz), 5. 06 (2H, s), 4. 31 (1H, s), 3. 83 (3 H, s), 2. 80-2. 55 (2H, m), 2. 0 0-1. 80 (4H, m), 1. 70-1. 55 (1 H, m), 1. 40-1. 15 (3H, m)
Purity > 90% (NMR)	
MS 568 (M+1)	

Table 208

Example No.	315 1H NMR(δ) ppm
O HCI HO N C	N= 300MHz, DMSO-d6 8. 84 (2H, d, J=6. 3Hz), 8. 28 (1H , s), 8. 17 and 7. 99 (2H, ABq, J=8 . 7Hz), 7. 87-7. 85 (3H, m), 7. 70 -7. 50 (3H, m), 7. 52 (1H, d, J=8. 3Hz), 7. 18 (2H, d, J=8. 7Hz), 5. 22 (2H, s) 4. 31 (1H, br t, J=12. 5Hz), 2. 36-2. 18 (2H, m), 2. 03-1. 78 (4H, m), 1. 70-1. 5 8 (1H, m), 1. 50-1. 23 (3H, m)
Purity > 9 0 % (NM	MR)
MS 538 (M+1)	

Example No.	316	1H NMR(δ) ppm
HCI CI N N N N N N N N N N N N N N N N N	O HZ	300MHz, DMSO-d6 9. 23(1H, t, J=6. 3Hz), 8. 29(1H, s), 8. 25-8. 22(2H, m), 8. 03(2H, d, J=7. 9Hz), 7. 55-7. 48(5H, m) 7. 34(4H, d, J=4. 4Hz), 7. 28-7. 22(3H, m), 5. 15(2H, s), 4. 52(2H, d, J=5. 9Hz), 4. 35(1H, br t, J=12. 1Hz), 2. 37-2. 18(2H, m), 2. 08-1. 95(2H, m), 1. 91-1. 79(2H, m), 1. 72-1. 59(1H, m), 1. 47-1. 19(3H, m)
Purity > 9 0 %	(NMR)	m)
MS 670 (M+1)	

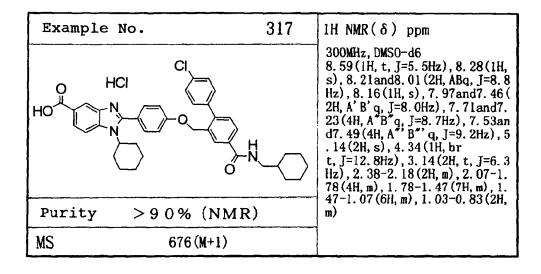


Table 209

Example No.	318	1H NMR(δ) ppm
2HCI CI		300MHz, DMSO-d6 9.63 (1H, t, J=4.8Hz), 8.86and7.97 (4H, ABq, J=6.6Hz), 8.30 (1H, s), 8.27 (1H, s), 8.23and8.03 (2H, A 'B'q, J=8.8Hz), 8.09and7.54 (2 H, A"B"q, J=8.1Hz), 7.73and7.2 4 (4H, A"'B"'q, J=8.8Hz), 7.54a nd7.52 (4H, A"'B""q, J=8.8Hz), 5.16 (2H, s) 4.78 (2H, d, J=5.6Hz), 4.35 (1H, br t, J=11.0Hz), 2.39-2.19 (2H, m)
Purity > 9 0 %	(NMR)	, 2. 07-1. 96 (2H, m), 1. 91-1. 78 (2H, m), 1. 70-1. 57 (1H, m) 1. 50-1
MS 671 (I	M+1)	. 19 (3H, m)

Example No. 3	19 1H NMR(δ) ppm
HCI CI HO N N N N N N	300MHz, DMSO-d6 8. 28(1H, s), 8. 24and8. 03(2H, A Bq, J=9. 0Hz), 7. 77(1H, s), 7. 70 (2H, d, J=8. 4Hz), 7. 64-7. 10(13 H, m), 5. 16(2H, s), 4. 74and4. 57 (total 2H, each br s), 4. 34(1H, br t, J=11. 7Hz), 2. 90(3H, s), 2. 35 -2. 17(2H, m), 2. 07-1. 93(2H, m) , 1. 93-1. 78(2H, m), 1. 71-1. 57(1H, m), 1. 51-1. 19(3H, m)
Purity > 90% (NMR)	
MS 684 (M+1)	

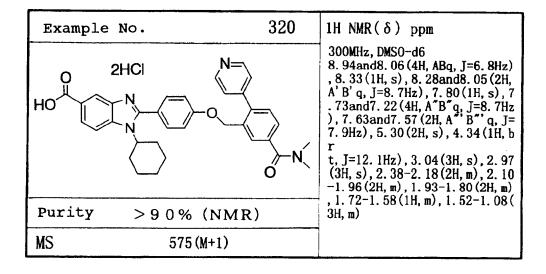


Table 210

Example No.	321	1H NMR(δ) ppm
O 2HCI HO N O		300MHz, DMSO-d6 11. 19(1H, br s), 8. 31(1H, s), 8. 23and8. 02(2 H, ABq, J=9. 0Hz), 7. 77(1H, s), 7 . 72and7. 23(4H, A'B'q, J=8. 7Hz), 7. 59and7. 48(2H, A"B"q, J=7. 9Hz), 7. 53and7. 51(4H, A"B"'q, J=9. 0Hz), 5. 16(2H, s), 4. 72-2 . 97(8H, br m), 4. 34(1H, br t, J=12. 1Hz), 2. 79(3H, s), 2. 38 -2. 17(2H, m), 2. 07-1. 93(2H, m)
Purity > 9 0 %	(NMR)	, 1.93-1.78 (2H, m), 1.69-1.58 (1H, m), 1.50-1.10 (3H, m)
MS 663	(M+1)	

Example No.	322	1H NMR(δ) ppm
2HCI HONNO		300MHz, DMSO-d6 9. 54 (1H, t, J=5. 7Hz), 8. 91 (1H, s), 8. 81 (1H, d, J=4. 9Hz), 8. 48 (1H, d, J=7. 9Hz), 8. 32 (1H, s), 8. 27 (1H, d, J=9. 0Hz), 8. 25 (1H, s), 8. 07-7. 97 (3H, m), 7. 74 and 7. 2 5 (4H, ABq, J=8. 9Hz), 7. 56-7. 49 (5H, m), 5. 16 (2H, s), 4. 69 (2H, d, J=5. 6Hz), 4. 36 (1H, br t, J=12. 4Hz), 2. 37-2. 20 (2H, m), 2. 09-1. 97 (2H, m), 1. 91-1. 78 (
Purity >90% (NMR))	2H, m), 1. 70-1. 57 (1H, m), 1. 50- 1. 17 (3H, m)
MS 671 (M+1)		

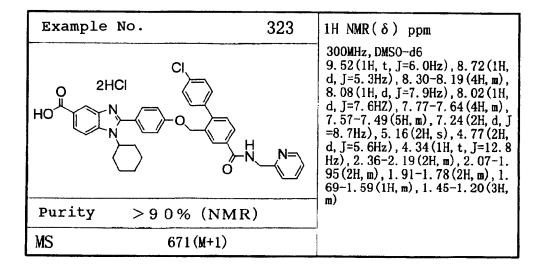


Table 211

Example No.	324	1H NMR(δ) ppm
HCI N O	HZ HZ	300MHz, DMSO-d6 8. 36 (1H, d, J=7. 9Hz), 8. 30 (1H, s), 8. 28and8. 05 (2H, ABq, J=8. 8 Hz), 8. 16 (1H, s), 7. 79and7. 46 (2H, A' B' q, J=8. 3Hz), 7. 74and7. 25 (4H, A" B" q, J=8. 9Hz), 7. 52and7. 50 (4H, A" B" q, J=8. 7Hz), 5. 14 (2H, s), 4. 36 (1H, brt, J=12. 1Hz), 3. 80 (1H, brs), 2. 39-2. 18 (2H, m), 2. 10-1. 98 (2H, m), 1. 93-1. 57 (8H, m), 1. 4
Purity > 90%	(NMR)	9-1.04(8H, m)
MS 662 (I	M+1)	

Example	No.		325	1H NMR(δ) ppm
о 2H ⁰ но N	CI CI	HN O	N	300MHz, DMSO-d6 8. 86(1H, t, J=6. OHz), 8. 84and8 .00(4H, ABq, J=6. 6Hz), 8. 33(1H, s), 8. 27and8. 04(2H, A'B'q, J=9. OHz), 8. 12(1H, s), 7. 92and7. 46(2H, A"B"q, J=7. 9Hz), 7. 74and7. 23(4H, A"B"q, J=9. OHz), 7. 53and7. 49(4H, A""B""q, J=9. 1 Hz), 5. 13(2H, s), 4. 36(1H, brt, J=12. 8Hz), 3. 70(2H, td, J=6. 8Hz), 3. 21(2H, t, J=6. 8Hz)
Purity	> 9 0 %	(NMR)		, 2. 38-2. 20 (2H, m), 2. 09-1. 95 (2H, m), 1. 91-1. 77 (2H, m), 1. 70- 1. 59 (1H, m), 1. 49-1. 20 (3H, m)
MS	685	(M+1)		1. 55 (111, m), 1. 45-1. 20 (511, m)

Example No.	326	1H NMR(δ) ppm
HO N F		300MHz, DMSO-d6 12.80(1H, brs), 8.23(1H, s), 7. 90(1H, d, J=8.7Hz), 7.83(1H, d, J=8.7Hz), 7.60-7.50(5H, m), 7. 39(2H, d, J=7.8Hz), 7.23-7.10(3H, m), 7.05(1H, d, J=7.8Hz), 6. 85(1H, s), 3.94(1H, s), 2.97, 2. 88(6H, s), 2.30-2.10(2H, m), 1. 90-1.50(5H, m), 1.40-1.00(3H, m)
Purity > 90% (NM	IR)	
MS 610 (M+1)		

Table 212

Example No.	327	1H NMR(δ) ppm
HO N F O	ОН	300MHz, DMSO-d6 13.20-12.60(2H, brs), 8.23(1H, s), 7.98(2H, d, J=6.6Hz), 7.95 (1H, d, J=8.7Hz), 7.87(1H, d, J=8.7Hz), 7.70-7.50(5H, m), 7.27 -7.20(3H, m), 7.08(1H, d, J=7.8 Hz), 6.90(1H, s), 3.93(1H, s), 2 .51-2.05(2H, m), 1.90-1.70(4H, m), 1.65-1.55(1H, m), 1.40-1. 10(3H, m)
Purity > 90% (N	MR)	
MS 583 (M+1	l)	

Table 213

$\begin{array}{c c} & & & & \\ & & & & \\ & & & & \\$			
Ex. No.	R	R'	
2001	-н	4-(-Me)	
2002	-Н	3-(-CF ₃)	
2003	5-(-F)	-Н	
2004	3-(-F)	2-(-F)	
2005	3-(-F)	3-(-F)	
2006	3-(-F)	4-(-F)	
2007	4-(-F)	4-(-F)	
2008	5-(-F)	4-(-F)	
2009	6-(-F)	4-(-F)	
2010	4-(-F)	4-(-C1)	
2011	5-(-F)	4-(-Me)	
2012	5-(-F)	4-(-CF ₃)	
2013	5-(-F)	4-(-CO ₂ H)	
2014	5-(-F)	4-(-CO ₂ Me)	
2015	5-(-F)	4- (" N)	
2016	5-(-F)	4-(-CONH ₂)	
2017	5-(-F)	4-{-CON (Me) ₂ }	
2018	5-(-F)	4-(-OMe)	
2019	5-(-F)	4-(-SMe)	
2020	5-(-F)	4 — (0 4 — S-Me)	
2021	5-(-F)	$4 - \begin{pmatrix} 0 \\ -S - \text{Me} \end{pmatrix}$ $4 - \begin{pmatrix} 0 \\ -S - \text{Me} \end{pmatrix}$ $4 - \begin{pmatrix} 0 \\ -S - \text{Me} \end{pmatrix}$	

2022	4-(-C1)	-H
2023	4-(-Cl)	4-(-F)
2024	4-(-Cl)	4-(-Cl)
2025	4-(-Cl)	4-(-Me)
2026	5-(-Cl)	4-(-CF ₃)
2027	4-(-Cl)	4-(-CO ₂ H)
2028	5-(-Cl)	4-(-CO ₂ Me)
2029	5-(-Cl)	4- (N)
2030	4-(-Cl)	4-(-CONH ₂)
2031	5-(-Cl)	4-{-CON (Me) ₂ }
2032	5-(-C1)	3-(-OMe)
2033	4-(-Cl)	4-(-SMe)
2034	5-(-Cl)	4- (-S-Me)
2035	4-(-Cl)	$ \begin{array}{c} $
2036	5- (-CN)	4-(-F)
2037	4-(-CN)	4-(-C1)
2038	5-(-NO ₂)	4-(-F)
2039	4-(-NO ₂)	4-(-Cl)
2040	5-(-Me)	4-(-CO ₂ H)
2041	5-(-Me)	4-(-CO ₂ Me)
2042	5-(-Me)	4- (-N)
2043	5-(-CF ₃)	4-(-CO ₂ H)
2044	5-(-CF ₃)	4-(-CO ₂ Me)
2045	5-(-CF ₃)	4- (-N)
2046	5- (-CO ₂ H)	4-(-F)
2047	4-(-CO ₂ H)	4-(-C1)
2048	5-(-CO ₂ Me)	4-(-F)

2049	5-(-CO ₂ Me)	4-(-Cl)
2050	5-(-Ac)	4-(-F)
2051	5-(-Ac)	4-(-Cl)
2052	5- (N)	-Н
2053	5- (N)	4-(-F)
2054	5- (- N \)	4-(-Cl)
2055	5- (—N)	4-(-CN)
2056	5- (—N)	4-(-NO ₂)
2057	5- (-)	4-(-Me)
2058	₅₋ (— N)	4-(-CF ₃)
2059	₅₋ (—N)	4-(-Ac)
2060	₅₋ (— N —)	4-(-CO ₂ H)
2061	$_{5-}$ $(\stackrel{0}{-}$ N \bigcirc $)$	4-(-CO ₂ Me)
2062	5- (N)	4- (" N)
2063	5- (N)	4-(-CONH ₂)
2064	5- (N)	4-{-CON (Me) ₂ }
2065	5- (-1)	4-{-C(=NH)NH ₂ }
2066	5- (- N)	4-(-OMe)
2067	5- (-1-1-)	$4-\left(-0-CH_{2}^{0}-N\right)$
2068	5- (N)	4-(-NHMe)

2069	5- (N)	4-(-NHAc)
2070	5-(-1-1-)	$4 - \left(\begin{array}{c} 0 \\ -N - S \\ 0 \end{array} \right)$
2071	5- (N)	4-(-SMe)
2072	5- (N)	4- (- S-Ne)
2073	5- (N)	4 - (-\$- M e)
2074	5-($4 - \begin{pmatrix} -\ddot{\ddot{S}} - NH_2 \\ \ddot{\ddot{O}} \end{pmatrix}$
2075	5- (N)	$4-\left\{ egin{array}{c} 0\\ -\ddot{\ddot{s}}-N(\mathrm{Me})_{2} \end{array} ight\}$
2076	5-(-CONH ₂)	-H
2077	5-(-CONH ₂)	4-(-F)
2078	5-(-CONH ₂)	2,3,4,5,6-penta-(-F)
2079	5-(-CONH ₂)	2-(-Cl)
2080	5-(-CONH ₂)	3-(-Cl)
2081	3-(-CONH ₂)	2-(-C1)
2082	3-(-CONH ₂)	3-(-Cl)
2083	3-(-CONH ₂)	4-(-C1)
2084	4-(-CONH ₂)	2-(-Cl)
2085	4-(-CONH ₂)	3-(-Cl)
2086	4-(-CONH ₂)	4-(-Cl)
2087	6-(-CONH ₂)	2-(-Cl)
2088	6-(-CONH ₂)	3-(-Cl)
2089	6- (-CONH ₂)	4-(-Cl)
2090	5-(-CONH ₂)	3,5-di-(-Cl)
2091	5-(-CONH ₂)	4-(-CN)
2092	5-(-CONH ₂)	4-(-NO ₂)
2093	5-(-CONH ₂)	4-(-Me)

2094	5-(-CONH ₂)	2,6-di-(-Me)
2095	5-(-CONH ₂)	4-(-CF ₃)
2096	5-(-CONH ₂)	4-(-Ac)
2097	5-(-CONH ₂)	4-(-CO ₂ H)
2098	5-(-CONH ₂)	4-(-CO ₂ Me)
2099	5- (-CONH ₂)	$ \begin{array}{c} $
2100	5-(-CONH ₂)	
2101	5-(-CONH ₂)	3,5-di-(-CONH ₂)
2102	5-(-CONH ₂)	4-{-CON (Me) ₂ }
2103	5-(-CONH ₂)	4-{-C (=NH) NH ₂ }
2104	5-(-CONH ₂)	4-(-OMe)
2105	5-(-CONH ₂)	3,4,5-tri-(-OMe)
2106	5-(-CONH ₂)	$4-\left(-0-CH_{2}^{0}-N\right)$
2107	5-(-CONH ₂)	4-(-NHMe)
2108	5-(-CONH ₂)	4-(-NHAc)
2109	5-(-CONH ₂)	4- (-SMe)
2110	5-(-CONH ₂)	
2111	5-(-CONH ₂)	4 - (-S-Me)
2112	5- (-CONH ₂)	$4-\begin{pmatrix} 0\\ -\ddot{s}-Me \end{pmatrix}$
2113	5-(-CONH ₂)	$4 - \begin{pmatrix} 0 \\ -5 \\ 0 \end{pmatrix} - NH_2 \end{pmatrix}$
2114	5- (-CONH ₂)	$4-\left\{egin{array}{c}0\\-\ddot{\ddot{3}}-N\left(Me ight)_{2}\end{array} ight\}$
2115	5-{-CON (Me) ₂ }	-Н
2116	5-{-CON (Me) ₂ }	4-(-F)
2117	4-{-CON (Me) ₂ }	4-(-C1)
2118	5-{-CON (Me) ₂ }	4-(-CN)

2119	$5-\{-CON(Me)_2\}$	4-(-NO ₂)
2120	5-{-CON(Me) ₂ }	4-(-Me)
2121	4-{-CON (Me) ₂ }	4-(-CF ₃)
2122	5-{-CON(Me) ₂ }	4-(-Ac)
2123	5-{-CON(Me) ₂ }	4-(-CO ₂ H)
2124	5-{-CON (Me) ₂ }	4-(-CO ₂ Me)
2125	5-{-CON (Me) ₂ }	$ \begin{array}{c} \begin{pmatrix} 0 \\ - N \end{pmatrix} \\ 3-(-CONH_2) \end{array} $
2126	5-{-CON(Me) ₂ }	3-(-CONH ₂)
2127	4-{-CON (Me) ₂ }	4-{-CON (Me) ₂ }
2128	5-{-CON (Me) ₂ }	$4 - \{-C (=NH) NH_2\}$
2129	5-{-CON (Me) ₂ }	4-(-OMe)
2130	5-{-CON (Me) ₂ }	$4-\left(-0-CH_{2}\overset{0}{\longrightarrow}N\right)$
2131	5-{-CON (Me) ₂ }	4-(-NHMe)
2132	5-{-CON (Me) ₂ }	4-(-NHAc)
2133	$5-\{-CON(Me)_2\}$	$\frac{4 - \begin{pmatrix} -N - S - Ne \\ H & 0 \end{pmatrix}}{4 - (-SMe)}$
2134	$4-\{-CON(Me)_2\}$	4-(-SMe)
2135	5-{-CON (Me) ₂ }	$4 - \begin{pmatrix} 0 \\ -\ddot{s} - Me \end{pmatrix}$
2136	4-{-CON (Me) ₂ }	$4 - \begin{pmatrix} 0 \\ -\frac{9}{5} - \text{Me} \end{pmatrix}$
2137	5-{-CON (Me) ₂ }	$4 - \begin{pmatrix} 0 \\ -\ddot{S} - NH_2 \\ 0 \end{pmatrix}$
2138	5-{-CON (Me) ₂ }	$4 - \left\{ \begin{array}{c} 0 \\ -\ddot{S} - N \text{ (Me)}_{z} \end{array} \right\}$
2139	5-(-OMe)	-Н
2140	5-(-OMe)	4-(-F)
2141	3-(-OMe)	4-(-Cl)
2142	4-(-OMe)	4-(-Cl)
2143	5-(-OMe)	2-(-Cl)

2144 5-(-OMe) 3-(-C1)			
2146	2144	5-(-OMe)	3-(-Cl)
2147 5- (-OMe) 4- (-NO ₂) 2148 5- (-OMe) 4- (-Me) 2149 5- (-OMe) 4- (-CF ₃) 2150 5- (-OMe) 4- (-CO ₂ H) 2151 4- (-OMe) 4- (-CO ₂ H) 2152 4,5-di- (-OMe) 4- (-CO ₂ H) 2153 5- (-OMe) 4- (-CO ₂ Me) 2154 5- (-OMe) 4- (-CONH ₂) 2155 5- (-OMe) 4- (-CON (Me) ₂) 2156 5- (-OMe) 4- (-CON (Me) ₂) 2157 5- (-OMe) 4- (-CMe) 4- (-OMe) 2158 5- (-OMe) 4- (-OMe) 4- (-OMe) 2159 5- (-OMe) 4- (-OMe) 4- (-OMe) 2160 5- (-OMe) 4- (-NHMe) 2161 5- (-OMe) 4- (-NHAC) 2162 5- (-OMe) 4- (-NHAC) 2163 5- (-OMe) 4- (-S-Ne) 4- (-S-Ne) 2164 5- (-OMe) 4- (-S-Ne) 3- (-S-Ne) 4- (-S-Ne) 3- (-S-Ne) 3- (-OMe) 3- (-S-Ne) 3- (-S-Ne) 3- (-OMe) 3- (-S-Ne) 3-	2145	6-(-OMe)	4-(-Cl)
2148 5-(-OMe) 4-(-Me) 2149 5-(-OMe) 4-(-CF ₃) 2150 5-(-OMe) 4-(-CO ₂ H) 2151 4-(-OMe) 4-(-CO ₂ H) 2152 4,5-di-(-OMe) 4-(-CO ₂ H) 2153 5-(-OMe) 4-(-CO ₂ Me) 2154 5-(-OMe) 4-(-CONH ₂) 2155 5-(-OMe) 4-(-CON (Me) ₂) 2156 5-(-OMe) 4-(-CON (Me) ₂) 2157 5-(-OMe) 4-(-COMe) 2158 5-(-OMe) 4-(-OMe) 2159 5-(-OMe) 4-(-OMe) 2160 5-(-OMe) 4-(-OMe) 2161 5-(-OMe) 4-(-NHAC) 2162 5-(-OMe) 4-(-NHAC) 2163 5-(-OMe) 4-(-SMe) 4-(-SMe) 2164 5-(-OMe) 4-(-SMe) 4-(-SMe) 2165 5-(-OMe) 4-(-SMe) 4-(-SMe) 2166 5-(-OMe) 4-(-SMe) 4-(-SMe) 2167 5-(-OMe) 4-(-SMe) 4-(-SMe) 2167 5-(-OMe) 4-(-SMe) 4-(-SMe) 3-(-SMe) ₄	2146	5-(-OMe)	4-(-CN)
2149	2147	5-(-OMe)	4-(-NO ₂)
2150 5-(-OMe) 4-(-Ac) 2151 4-(-OMe) 4-(-CO ₂ H) 2152 4,5-di-(-OMe) 4-(-CO ₂ H) 2153 5-(-OMe) 4-(-CO ₂ Me) 2154 5-(-OMe) 4-(-CONH ₂) 2155 5-(-OMe) 4-(-CONH ₂) 2156 5-(-OMe) 4-(-CON (Me) ₂) 2157 5-(-OMe) 4-(-CON (Me) ₂) 2158 5-(-OMe) 4-(-OMe) 2159 5-(-OMe) 4-(-OMe) 2159 5-(-OMe) 4-(-NHMe) 2161 5-(-OMe) 4-(-NHMe) 2162 5-(-OMe) 4-(-NHAC) 2163 5-(-OMe) 4-(-SMe) 4-(-SMe) 2164 5-(-OMe) 4-(-SMe) 2165 5-(-OMe) 4-(-SMe) 2166 5-(-OMe) 4-(-SMe) 2166 5-(-OMe) 4-(-SMe) 2167 5-(-OMe) 4-(-SMe) 2167 5-(-OMe) 4-(-SMe) 2167 5-(-OMe) 4-(-SMe) ₄ 3-(-SMe) ₄ 3-(-SMe) ₄ 3-(-SMe) ₂ 3-(-SMe)	2148		4-(-Me)
2151 4-(-OMe) 4-(-CO ₂ H) 2152 4,5-di-(-OMe) 4-(-CO ₂ H) 2153 5-(-OMe) 4-(-CO ₂ Me) 2154 5-(-OMe) 4-(-CONH ₂) 2155 5-(-OMe) 4-(-CON(Me) ₂) 2156 5-(-OMe) 4-(-CON(Me) ₂) 2157 5-(-OMe) 4-(-C(=NH)) NH ₂ 2158 5-(-OMe) 4-(-OMe) 4-(-OMe) 2159 5-(-OMe) 4-(-OMe) 4-(-NHMe) 2160 5-(-OMe) 4-(-NHAC) 2161 5-(-OMe) 4-(-NHAC) 2162 5-(-OMe) 4-(-NHAC) 2163 5-(-OMe) 4-(-SMe) 2164 5-(-OMe) 4-(-SMe) 2165 5-(-OMe) 4-(-SMe) 2166 5-(-OMe) 4-(-SMe) 2166 5-(-OMe) 4-(-SMe) 2167 5-(-OMe) 4-(-SMe) ₄ 3-(-SMe) ₂ 3-(-SMe)	2149	5-(-OMe)	4-(-CF ₃)
2152 4,5-di-(-OMe) 4-(-CO ₂ H) 2153 5-(-OMe) 4-(-CO ₂ Me) 2154 5-(-OMe) 4-(-CONH ₂) 2155 5-(-OMe) 4-(-CONH ₂) 2156 5-(-OMe) 4-(-CON (Me) ₂) 2157 5-(-OMe) 4-(-COMe) 2158 5-(-OMe) 4-(-OMe) 2159 5-(-OMe) 4-(-OMe) 2160 5-(-OMe) 4-(-NHMe) 2161 5-(-OMe) 4-(-NHAC) 2162 5-(-OMe) 4-(-NHAC) 2163 5-(-OMe) 4-(-SMe) 2164 5-(-OMe) 4-(-SMe) 2165 5-(-OMe) 4-(-SMe) 2166 5-(-OMe) 4-(-SMe) 2167 5-(-OMe) 4-(-SMe) 2167 5-(-OMe) 4-(-SMe) 2167 5-(-OMe) 4-(-SMe) 2168 5-(-OMe) 4-(-SMe) 2169 5-(-OMe) 4-(-SMe) 2160 5-(-OMe) 4-(-SMe) 2161 5-(-OMe) 4-(-SMe) 2162 5-(-OMe) 4-(-SMe) 2163 5-(-OMe) 4-(-SMe) 2164 5-(-OMe) 4-(-SMe) 2165 5-(-OMe) 4-(-SMe) 2166 5-(-OMe) 4-(-SMe) 2167 5-(-OMe) 4-(-SMe) ₂ 4-(-SMe)	2150	5-(-OMe)	4-(-Ac)
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2151	4-(-OMe)	4-(-CO ₂ H)
2154	2152		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2153	5-(-OMe)	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2154	5-(-OMe)	4- (-N)
2157 $5-(-OMe)$ $4-\{-C(=NH) NH_2\}$ 2158 $5-(-OMe)$ $4-(-OMe)$ 2159 $5-(-OMe)$ $4-(-O-CH_2^{O}-N)$ 2160 $5-(-OMe)$ $4-(-NHMe)$ 2161 $5-(-OMe)$ $4-(-NHAC)$ 2162 $5-(-OMe)$ $4-(-NHAC)$ 2163 $5-(-OMe)$ $4-(-SMe)$ 2164 $5-(-OMe)$ $4-(-SMe)$ 2165 $5-(-OMe)$ $4-(-S-Me)$ 2166 $5-(-OMe)$ $4-(-S-Me)$ 2167 $5-(-OMe)$ $4-(-S-NH_2)$ 2168 $5-(-OMe)$ $4-(-S-NH_2)$ 2169 $4-(-S-NH_2)$ $4-(-S-NH_2)$ 2160 $4-(-S-NH_2)$ $4-(-S-NH_2)$ 2160 $4-(-S-NH_2)$ $4-(-S-NH_2)$ 2160 $4-(-S-NH_2)$	2155	5-(-OMe)	4-(-CONH ₂)
2158 5- (-OMe) 4- (-OMe) 2159 5- (-OMe) 4- (-O-CH ₂ -N) 2160 5- (-OMe) 4- (-NHMe) 2161 5- (-OMe) 4- (-NHAC) 2162 5- (-OMe) 4- (-NHAC) 2163 5- (-OMe) 4- (-S-Ne) 2164 5- (-OMe) 4- (-S-Ne) 2165 5- (-OMe) (-S-Ne) 2166 5- (-OMe) (-S-Ne) 2167 5- (-OMe) (-S-NH ₂) 4- 0 2167 5- (-OMe) (-S-NH ₂) 4- 0 2167 5- (-OMe) (-S-NH ₂)	2156	5-(-OMe)	4-{-CON(Me) ₂ }
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	2157	5-(-OMe)	4-{-C(=NH)NH ₂ }
2160	2158	5-(-OMe)	4-(-OMe)
2161 5- (-OMe) 4- (-NHAC) 2162 5- (-OMe)	2159	5-(-OMe)	$4-\left(-0-CH_{2} - N\right)$
2162 $5-(-OMe)$ $4-(-N-S-Ne)$ $4-(-SMe)$ 2163 $5-(-OMe)$ $4-(-SMe)$ 2164 $5-(-OMe)$ $4-(-S-Ne)$ $4-(-S-Ne)$ 2165 $5-(-OMe)$ $4-(-S-Ne)$ $4-(-S-Ne)$ 2166 $5-(-OMe)$ $4-(-S-Ne)$ $4-(-S-Ne)$ $4-(-S-Ne)$ 2167 $5-(-OMe)$ $4-(-S-Ne)$	2160	5-(-OMe)	4-(-NHMe)
2163	2161	5-(-OMe)	1
2163	2162	5-(-OMe)	(-N-S-Ne)
2165 $5-(-OMe)$ $\begin{pmatrix} 0 \\ -\ddot{s}-Me \end{pmatrix}$ 2166 $5-(-OMe)$ $\begin{pmatrix} 0 \\ -\ddot{s}-NH_2 \end{pmatrix}$ 2167 $5-(-OMe)$ $\begin{pmatrix} 0 \\ -\ddot{s}-NH_2 \end{pmatrix}$ $\begin{pmatrix} 0 \\ -\ddot{s}-N(Me) \\ 4- \end{pmatrix}$	2163	5-(-OMe)	4-(-SMe)
2166 $5-(-OMe)$ $\begin{pmatrix} 0 \\ -\frac{1}{5}-NH_2 \end{pmatrix}$ 2167 $5-(-OMe)$ $\begin{pmatrix} -\frac{1}{5}-N(Me)_2 \\ 4-\frac{1}{5}-N(Me)_2 \end{pmatrix}$	2164	5-(-OMe)	$4 - \begin{pmatrix} 0 \\ -\ddot{S} - \mathbf{Me} \end{pmatrix}$
2167 $5-(-OMe)$ $\left\{ \begin{array}{c} 4-0 \\ -\frac{9}{5}-N(Me)_{2} \end{array} \right\}$	2165	5-(-OMe)	$4 - \begin{pmatrix} 0 \\ -\ddot{s} - \mathbf{Me} \end{pmatrix}$
2167 $5-(-OMe)$ $\left\{ -\frac{0}{5}-N(Me)_{2} \right\}$ 2168 $5-(-NHMe)$ $4-(-F)$	2166	5-(-OMe)	4- 0
2168 5-(-NHMe) 4-(-F)	2167	5-(-OMe)	$4 - \left\{ \begin{array}{c} 0 \\ -\ddot{\ddot{s}} - N \text{ (Me)}_{2} \end{array} \right\}$
	2168	5-(-NHMe)	4-(-F)

2169	5-(-NHMe)	4-(-Cl)
2170	5-(-NHAc)	4-(-F)
2171	5-(-NHAc)	4-(-Cl)
2172	5-(-NHAc)	4-(-Ac)
2173	5-(-NHAc)	4-(-CONH ₂)
2174	5-(-NHAc)	4-{-CON (Me) ₂ }
2175	0 	4-(-F)
2176	$4 - \begin{pmatrix} -N - \ddot{S} - Me \\ H & \ddot{0} \end{pmatrix}$	4-(-C1)
2177	(-N-Š-Ne) 5- (N-Š-Ne)	4-(-Me)
2178	0 (N-S-Ne) 5 H Ö	4-(-CF ₃)
2179	0 (-N-5-We) 5-	4-(-CO ₂ H)
2180	(-N-S-We)	4-(-CO ₂ Me)
2181	(-N-S-We)	4- (-N_)
2182	5- (-N-8-We)	4-(-SMe)
2183	5- (-N-S-Me)	4 - (-Š-Me)
2184	5- (N-S-Me)	$4 - \begin{pmatrix} 0 \\ -\ddot{\ddot{s}} - \mathbf{Me} \end{pmatrix}$
2185	5-(-SMe)	4-(-F)
2186	4-(-SMe)	4-(-C1)
2187	5-(-SMe)	4-(-Me)
2188	5-(-SMe)	4-(-CF ₃)
2189	5-(-SMe)	4-(-Ac)
2190	5-(-SMe)	4-(-CONH ₂)
2191	5-(-SMe)	4-{-CON(Me) ₂ }

2192	5- (0 - S-Ne)	4-(-F)
2193	$4-\begin{pmatrix} 0\\ -\ddot{S}-Me \end{pmatrix}$	4-(-C1)
2194	$5-\begin{pmatrix}0\\-\dot{s}-\dot{s}\end{pmatrix}$	4-(-Me)
2195	5- (0 Me)	4-(-CF ₃)
2196	5- (4-(-Ac)
2197	5 – (4-(-CONH ₂)
2198	5- (-S-Ne)	4-{-CON (Me) ₂ }
2199	$5-\begin{pmatrix} 0\\ -\overset{0}{\overset{1}{\overset{1}{\overset{1}{\overset{1}{\overset{1}{\overset{1}{\overset{1}{$	4-(-F)
2200	$4-\left(egin{matrix} 0\\ -\ddot{3}-{ m Me}\\ 0 \end{smallmatrix} ight)$	4-(-Cl)
2201	(4-(-Me)
2202	(4-(-CF ₃)
2203	(4-(-Ac)
2204	0 (4-(-CONH ₂)
2205	0 5- (4-{-CON(Me) ₂ }
2206	0 (4-(-F)
2207	$\begin{pmatrix} 0 \\ -\ddot{\ddot{s}} - NH_2 \end{pmatrix}$	4-(-Cl)
2208	$\begin{pmatrix} 0 \\ -\ddot{\ddot{s}} - NH_2 \end{pmatrix}$	2,4-di-(-C1)
2209	0 (4-(-Me)
2210	$ \begin{array}{c} 4 - 0 \\ $	3-(-CF ₃)

2211	(-\$-NH ₂) 5-	4-(-CF ₃)
2212	$5 - \begin{pmatrix} 0 \\ -5 \\ 0 \end{pmatrix}$	4-(-CONH ₂)
2213	0 - (-9-NH ₂) 5-	4-{-CON (Me) ₂ }
2214	0 - (-\$-NH ₂) 5-	4-(-SMe)
2215	$\begin{pmatrix} 0\\ -\ddot{s}-NH_2 \end{pmatrix}$ 5-	4- (-Š-Me)
2216	0 - (\$-NH ₂) 5-	4- (-\$-Ne)
2217	$\left\{ egin{array}{c} 0 \\ -\ddot{\ddot{s}} - N \left(\mathrm{Me} ight)_{2} \end{array} ight\}$	4-(-F)
2218	$4-\left\{egin{array}{c}0\\-\ddot{\ddot{s}}-N\left(\mathrm{Me} ight)_{2}\end{array} ight\}$	4-(-Cl)
2219	$\left\{ egin{array}{c} 0 \\ -\ddot{\ddot{s}} - \mathbf{N} \left(\mathbf{Me} ight)_{2} \end{array} ight\}$	4-(-Me)
2220	$5-\left\{egin{array}{c} 0\\ -\ddot{s}-N\left(Ne ight)_2\\ 0\end{array} ight\}$	4-(-CF ₃)
2221	$5-\left\{egin{array}{c} 0 \ -\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	4-(-CONH ₂)
2222	$5-\left\{ egin{array}{c} 0\\ -\ddot{\ddot{s}}-N\left(Ne\right)_{2} \end{array} \right\}$	4-{-CON(Me) ₂ }
2223	$5 - \left\{ \begin{array}{c} 0 \\ -\ddot{s} - N \left(\text{Me} \right)_2 \end{array} \right\}$	4-(-SMe)
2224	$5 - \left\{ \begin{array}{c} 0 \\ -\ddot{s} - N \text{ (Me)}_{2} \end{array} \right\}$	4 - (
2225	$5 - \left\{ \begin{array}{c} 0 \\ -\ddot{S} - N \text{ (Me)}_{2} \end{array} \right\}$	$4 - \begin{pmatrix} 0 \\ -1 \\ 0 \end{pmatrix}$ Ne
2226	5-{-O-(CH ₂) ₂ -OH}	4-(-C1)
2227	5-{-O-(CH ₂) ₃ -OH}	4-(-Cl)
2228	5- (-0)	4-(-Cl)
2229	5- (-0)	4-(-Cl)

2230	5- (-0 N-Me)	4-(-C1)
2231	5- (-0 \ N OH)	4-(-Cl)
2232	5- (-0 N OH)	4-(-Cl)
2233	5- (N OH)	4-(-Cl)
2234	5- (N OH)	4-(-Cl)
2235	5- (NOH)	4-(-Cl)
2236	5- (NO OH)	4-(-Cl)
2237	5- (N CO ₂ H)	4-(-Cl)
2238	O Me Me Ne Ne	4-(-Cl)
2239	O Me Me OH	4-(-Cl)
2240	5- (N OMe)	4-(-Cl)
2241	5- (,)	4-(-Cl)
2242	5- (4-(-Cl)
2243	(N N N S Ne)	4-(-Cl)

2244	5- (, ,)	4-(-Cl)
2245	5- (N S=0)	4-(-Cl)
2246	5- (NOH)	4-(-Cl)
2247	5- (N)	4-(-Cl)
2248	4- (Å)	4-(-Cl)
2249	5- (JH)	4-(-Cl)
2250		4-(-Cl)
2251		4-(-Cl)
2252		4-(-Cl)
2253	5- (Ne N	4-(-Cl)
2254	5- (N N Me)	4-(-Cl)

Table 214

	Table 21	
HO ₂ C N F 6 1 2 3 4 6 5 R		
Ex. No.	R	R'
2255	-Н	-Н
2256	-Н	4-(-Me)
2257	-H	3-(-CF ₃)
2258	5-(-F)	-Н
2259	5-(-F)	4-(-F)
2260	5-(-F)	4-(-C1)
2261	5-(-F)	4-(-Me)
2262	5-(-F)	4-(-CF ₃)
2263	5-(-F)	4-(-CO ₂ H)
2264	5-(-F)	4-(-CO ₂ Me)
2265	5-(-F)	4- (-N)
2266	5-(-F)	4- (-CONH ₂)
2267	5-(-F)	4-{-CON (Me) ₂ }
2268	5-(-F)	4-(-OMe)
2269	5-(-F)	4-(-SMe)
2270	5-(-F)	$4-\begin{pmatrix}0\\-\dot{s}-\dot{m}e\end{pmatrix}$
2271	5-(-F)	$4 - \begin{pmatrix} 0 \\ -\ddot{S} - \text{Me} \\ 0 \end{pmatrix}$
2272	4-(-Cl)	-н
2273	5-(-Cl)	4-(-F)
2274	4-(-Cl)	4-(-Cl)
2275	5-(-Cl)	4-(-Me)

F	5 / 51)	4 (GE)
2276	5-(-C1)	4-(-CF ₃)
2277	5- (-Cl)	4-(-CO ₂ H)
2278	5- (-C1)	4-(-CO ₂ Me)
2279	5-(-Cl)	$ \begin{array}{c} \begin{pmatrix} 0 \\ 4- \end{pmatrix} \\ 4-(-CONH_2) \end{array} $
2280	5-(-C1)	$4-(-CONH_2)$
2281	5-(-Cl)	4-{-CON (Me) ₂ }
2282	5-(-Cl)	4-(-OMe)
2283	5-(-C1)	4-(-SMe)
2284	5-(-Cl)	$4-\begin{pmatrix}0\\-\ddot{s}-\mathbf{Me}\end{pmatrix}$
2285	5-(-Cl)	4- (-\$-Ne) 4- 0
2286	5-(-CN)	4- (-F)
2287	5-(-CN)	4-(-C1)
2288	5-(-NO ₂)	4- (-F).
2289	5-(-NO ₂)	4-(-C1)
2290	5-(-Me)	4-(-CO ₂ H)
2291	5-(-Me)	4-(-CO ₂ Me)
2292	5-(-Me)	4-()
2293	5-(-CF ₃)	4-(-CO ₂ H)
2294	5-(-CF ₃)	4-(-CO ₂ Me)
2295	5-(-CF ₃)	4-()
2296	5-(-CO ₂ H)	4-(-F)
2297	4-(-CO ₂ H)	4-(-C1)
2298	5-(-CO ₂ Me)	4-(-F)
2299	5-(-CO ₂ Me)	4-(-C1)
2300	5-(-Ac)	4-(-F)
2301	5-(-Ac)	4-(-C1)

2302	5- (" N)	-Н
2303	5- (⁹ N)	4-(-F)
2304	4- (-N)	4-(-Cl)
2305	5- (N)	4- (-CN)
2306	5- (—N)	4-(-NO ₂)
2307	5- (N)	4-(-Me)
2308	5- (N)	4-(-CF ₃)
2309	₅₋ (— N)	4-(-Ac)
2310	5- (4-(-CO ₂ H)
2311	₅₋ (— N)	4-(-CO ₂ Me)
2312	5- (N)	4- (- N)
2313	5- (- N)	4-(-CONH ₂)
2314	5- (N)	4-{-CON (Me) ₂ }
2315	5- (N)	4-{-C (=NH) NH ₂ }
2316	5- (N)	4-(-OMe)
2317	5- (N)	$4-\left(-0-CH_{2}^{0}-N\right)$
2318	5- (-N)	4-(-NHMe)
2319	5- (ÎN)	4-(-NHAc)
2320	5- (N)	4 - (-N-S-Me)

2321	5- (" N)	4-(-SMe)
2322	5- (- N)	$4 - \begin{pmatrix} 0 \\ -\ddot{S} - Me \end{pmatrix}$
2323	5- (- 1)	$4 - \begin{pmatrix} 0 \\ -\ddot{S} - \mathbf{Me} \end{pmatrix}$
2324	5- (- N)	$4 - \begin{pmatrix} 0 \\ -\ddot{s} - NH_2 \end{pmatrix}$
2325	5- (N)	$4 - \left\{ \begin{array}{c} 0 \\ -\ddot{S} - N \left(Me \right)_{2} \end{array} \right\}$
2326	5-(-CONH ₂)	-н
2327	5-(-CONH ₂)	4-(-F)
2328	4-(-CONH ₂)	4-(-Cl)
2329	5-(-CONH ₂)	4-(-CN)
2330	5- (-CONH ₂)	4-(-NO ₂)
2331	5- (-CONH ₂)	4-(-Me)
2332	5-(-CONH ₂)	4-(-CF ₃)
2333	5-(-CONH ₂)	4-(-Ac)
2334	5- (-CONH ₂)	4-(-CO ₂ H)
2335	5- (-CONH ₂)	4-(-CO ₂ Me)
2336	5-(-CONH ₂)	4- (-N)
2337	5- (-CONH ₂)	4- (-CONH ₂)
2338	5- (-CONH ₂)	4-{-CON(Me) ₂ }
2339	5- (-CONH ₂)	4-{-C(=NH)NH ₂ }
2340	5-(-CONH ₂)	4-(-OMe)
2341	5- (-CONH ₂)	$4-\left(-0-CH_{\frac{1}{2}}^{0}-N\right)$
2342	5-(-CONH ₂)	4-(-NHMe)
2343	5-(-CONH ₂)	4-(-NHAc)
2344	5-(-CONH ₂)	4- (-SMe)
2345	5-(-CONH ₂)	4-(-SMe)

2346	5-(-CONH ₂)	$4-\begin{pmatrix}0\\-\dot{s}-\text{Me}\end{pmatrix}$
2347	5-(-CONH ₂)	$4 - \begin{pmatrix} 0 \\ -\ddot{S} - \dot{M}e \end{pmatrix}$
2348	5-(-CONH ₂)	$4 - \begin{pmatrix} 0 \\ -\ddot{s} - NH_2 \end{pmatrix}$
2349	5-(-CONH ₂)	$4 - \left\{ \begin{array}{c} 0 \\ -\ddot{S} - N \left(Me\right)_{2} \\ \ddot{0} \end{array} \right\}$
2350	5-{-CON(Me) ₂ }	-Н
2351	5-{-CON (Me) ₂ }	4-(-F)
2352	4-{-CON(Me) ₂ }	4-(-Cl)
2353	5-{-CON(Me) ₂ }	4-(-CN)
2354	5-{-CON(Me) ₂ }	4-(-NO ₂)
2355	5-{-CON(Me) ₂ }	4-(-Me)
2356	5-{-CON(Me) ₂ }	4-(-CF ₃)
2357	5-{-CON(Me) ₂ }	4-(-Ac)
2358	5-{-CON(Me) ₂ }	4-(-CO ₂ H)
2359	5-{-CON (Me) ₂ }	4-(-CO ₂ Me)
2360	5-{-CON(Me) ₂ }	4- (-CONH ₂)
2361	5-{-CON(Me) ₂ }	4-(-CONH ₂)
2362	5-{-CON(Me) ₂ }	4-{-CON (Me) ₂ }
2363	5-{-CON (Me) ₂ }	$4-\{-C (=NH) NH_2\}$
2364	5-{-CON(Me) ₂ }	4-(-OMe)
2365	5-{-CON (Me) ₂ }	$4-\left(-0-\operatorname{CH}_{2}^{0}-\operatorname{N}\right)$
2366	5-{-CON (Me) ₂ }	4-(-NHMe)
2367	5-{-CON (Me) ₂ }	4-(-NHAc)
2368	5-{-CON (Me) ₂ }	$4 - \begin{pmatrix} -N - \ddot{S} - Ne \\ H & \ddot{O} \end{pmatrix}$
2369	5-{-CON (Me) ₂ }	4-(-SMe)

2370	5-{-CON (Me) ₂ }	4 - (Š-Me)
2371	5-{-CON(Me) ₂ }	$4 - \begin{pmatrix} 0 \\ -\ddot{S} - \mathbf{Me} \\ 0 \end{pmatrix}$
2372	5-{-CON (Me) ₂ }	$4 - \begin{pmatrix} 0 \\ -S - NH_2 \end{pmatrix}$
2373	5-{-CON (Me) ₂ }	$4-\left\{ egin{array}{c} 0 \\ -\ddot{S}-N(\mathrm{Me})_{2} \end{array} ight\}$
2374	5-(-OMe)	-Н
2375	5-(-OMe)	4-(-F)
2376	5-(-OMe)	4-(-C1)
2377	5-(-OMe)	4-(-CN)
2378	5-(-OMe)	4-(-NO ₂)
2379	5-(-OMe)	4-(-Me)
2380	5-(-OMe)	4-(-CF ₃)
2381	5-(-OMe)	4-(-Ac)
2382	5-(-OMe)	4-(-CO ₂ H)
2383	5-(-OMe)	4-(-CO ₂ Me)
2384	5-(-OMe)	4- (-N)
2385	5-(-OMe)	4-(-CONH ₂)
2386	5-(-OMe)	4-{-CON (Me) ₂ }
2387	5-(-OMe)	$4-\{-C (=NH) NH_2\}$
2388	5-(-OMe)	4-(-OMe)
2389	5-(-OMe)	$4-\left(-0-\operatorname{CH}_{2}^{0}-\operatorname{N}\right)$
2390	5-(-OMe)	4-(-NHMe)
2391	5-(-OMe)	4-(-NHAc)
2392	5-(-OMe)	$4 - \begin{pmatrix} -N - S - Me \\ H & 0 \end{pmatrix}$
2393	5-(-OMe)	4-(-SMe)

2394	5-(-OMe)	4 - (- Š-Ne)
2395	5-(-OMe)	(-S-Me)
2396	5-(-OMe)	$4 - \begin{pmatrix} 0 \\ -\ddot{S} - NH_2 \end{pmatrix}$
2397	5-(-OMe)	$ \left\{ \begin{array}{c} 0 \\ -\ddot{S} - N \left(\text{Ne} \right)_2 \end{array} \right\} $
2398	5-(-NHMe)	4-(-F)
2399	5-(-NHMe)	4-(-Cl)
2400	5-(-NHAc)	4-(-F)
2401	5-(-NHAc)	4-(-Cl)
2402	5-(-NHAc)	4-(-Ac)
2403	5-(-NHAc)	4-(-CONH ₂)
2404	5-(-NHAc)	4-{-CON (Me) ₂ }
2405	5- (-N-S-Me)	4-(-F)
2406	5- (-N-S-Ne)	4-(-Cl)
2407	(-N-\$-Ne)	4-(-Me)
2408	(-N-S-Ne)	4-(-CF ₃)
2409	5- (-N-Ş-Me)	4-(-CO ₂ H)
2410	0 (-N-S-Me) 5-	4-(-CO ₂ Me)
2411	(-N-S-Me)	4- (-N)
2412	(-N-S-Me)	4-(-SMe)
2413	(-N-\$-Ne)	4 - (- S-Me)
2414	5- (-N-Ş-Ne) 5- H Ö	$4 - \begin{pmatrix} 0 \\ -\ddot{S} - \mathbf{Me} \end{pmatrix}$

2415	5-(-SMe)	4-(-F)
2416	5-(-SMe)	4-(-Cl)
2417	5-(-SMe)	4-(-Me)
2418	5-(-SMe)	4-(-CF ₃)
2419	5-(-SMe)	4-(-Ac)
2420	5-(-SMe)	4-(-CONH ₂)
2421	5-(-SMe)	4-{-CON (Me) ₂ }
2422	5- (0 -\$- M e)	4-(-F)
2423	0 5- (-s-We)	4-(-Cl)
2424	0 5- (-Š-Me)	4-(-Me)
2425	$5 - \begin{pmatrix} 0 \\ -\ddot{s} - \mathbf{Me} \end{pmatrix}$	4-(-CF ₃)
2426	0 5- (\$-Me)	4-(-Ac)
2427	$5-\begin{pmatrix}0\\-\dot{s}-Me\end{pmatrix}$	4-(-CONH ₂)
2428	0 5 – (– Š – Me)	4-{-CON(Me) ₂ }
2429	$5-\begin{pmatrix} -\ddot{s}-Ne \\ \ddot{0} \end{pmatrix}$	4-(-F)
2430	$\begin{pmatrix} 0 \\ -\ddot{S} - \mathbf{Me} \end{pmatrix}$	4-(-C1)
2431	$\left(\begin{array}{c}0\\-\ddot{s}-\mathrm{Me}\\\ddot{0}\end{array}\right)$	4-(-Me)
2432	$\begin{pmatrix} 0 \\ -\ddot{s} - \mathbf{Me} \end{pmatrix}$	4-(-CF ₃)
2433	$5-\begin{pmatrix}0\\-\ddot{5}-\mathrm{Me}\\0\end{pmatrix}$	4-(-Ac)
2434	$\left(egin{matrix} 0 & & & & & & \\ -\ddot{\mathbf{S}} & & & & & \\ \ddot{\mathbf{O}} & & & & & \\ & \ddot{\mathbf{O}} & & & & & \\ \end{array} \right)$	4-(-CONH ₂)
2435	0 (4-{-CON(Me) ₂ }
2436	$5 - \begin{pmatrix} 0 \\ -\frac{9}{9} - NH_2 \end{pmatrix}$	4-(-F)

2437	$5-\begin{pmatrix}0\\-1\\0\\0\end{pmatrix}$	4-(-C1)
2438	0 (-\$-NH₂) 5-	4-(-Me)
2439	$5-\begin{pmatrix}0\\-\ddot{s}-NH_2\end{pmatrix}$	4-(-CF ₃)
2440	0 (-\$-NH ₂) 5-	4-(-CONH ₂)
2441	0 (4-{-CON (Me) ₂ }
2442	0 - (4-(-SMe)
2443	(− (− (− NH ₂)	$4-\begin{pmatrix}0\\-\ddot{s}-\mathbf{Me}\end{pmatrix}$
2444	$\left(\begin{array}{c} 0 \\ -\ddot{s} - NH_2 \end{array} \right)$	4 — (- S - Ne)
2445	$5 - \left\{ \begin{array}{c} 0 \\ -\ddot{\ddot{s}} - N \left(Me \right)_2 \end{array} \right\}$	4-(-F)
2446	$5 - \left\{ \begin{array}{c} 0 \\ -\ddot{s} - N \left(Me \right)_2 \end{array} \right\}$	4-(-Cl)
2447	$5 - \left\{ \begin{array}{c} 0 \\ -\ddot{\mathbf{S}} - \mathbf{N} \left(\mathbf{Me} \right)_2 \end{array} \right\}$	4-(-Me)
2448	$5 - \left\{ \begin{array}{c} 0 \\ -\ddot{S} - N(Me)_{2} \end{array} \right\}$	4-(-CF ₃)
2449	$5 - \left\{ \begin{array}{c} 0 \\ -\ddot{9} - N \left(Me \right)_{2} \end{array} \right\}$	4-(-CONH ₂)
2450	$5-\left\{ egin{array}{c} 0\\ -\ddot{\ddot{s}}-N\left(\mathrm{Me} ight)_{2} \end{array} ight\}$	4-{-CON(Me) ₂ }
2451	$5 - \left\{ \begin{array}{c} 0 \\ -\ddot{9} - N(Ne)_{2} \\ \ddot{0} \end{array} \right\}$	4-(-SMe)
2452	5- { - 9-N (Ne) 2 }	$4 - \begin{pmatrix} 0 \\ -\ddot{s} - \mathbf{Me} \end{pmatrix}$
2453	$ \left\{ \begin{array}{c} 0\\ -\ddot{\$}-N(Ne)_{2} \end{array} \right\} $ 5-	$4 - \begin{pmatrix} 0 \\ -\frac{1}{5} - \text{Me} \end{pmatrix}$

Table 215

$\begin{array}{c c} HO_2C \\ \hline \\ N \\ \hline \\ S \\ \hline \\ 4 \\ \hline \\ 3 \\ R \\ \end{array}$		
Ex. No.	R	R'
2454	2-(-F)	2-(-F)
2455	2-(-F)	3-(-F)
2456	2-(-F)	4-(-F)
2457	3-(-Cl)	3-(-C1)
2458	3,5-di-(-Cl)	3,5-di-(-Cl)
2459	3-(-CN)	3-(-CN)
2460	3- (-NO ₂)	3-(-NO ₂)
2461	3-(-Me)	3-(-Me)
2462	3-(-CF ₃)	3-(-CF ₃)
2463	3-(-Ac)	3-(-Ac)
2464	3-(-CO ₂ H)	3-(-CO ₂ H)
2465	3-(-CO₂Me)	3-(-CO ₂ Me)
2466	3- (N)	3-(-1)
2467	3-(-CONH ₂)	3-(-CONH ₂)
2468	3-(-CONH ₂)	3-(-F)
2469	3- (-CONH ₂)	3-(-C1)
2470	3-{-CON (Me) ₂ }	3-{-CON(Me) ₂ }
2471	$3-\{-CON(Me)_2\}$	3-(-F)
2472	3-{-CON (Me) ₂ }	3-(-C1)
2473	$3-\{-C (=NH) NH_2\}$	3-{-C(=NH)NH ₂ }
2474	3-(-OMe)	3-(-OMe)
2475	$3-\left(-0-CH_{2}^{-1}-N\right)$	$3-\left(-0-CH_{2} - N\right)$

2476	3-(-NHMe)	3-(-NHMe)
2477	3-(-NHAc)	3-(-NHAc)
2478	3- (-N-S-Me)	3- (-N-Ş-Me)
2479	3-(-SMe)	3-(-SMe)
2480	$3-\begin{pmatrix}0\\-\ddot{s}-Me\end{pmatrix}$	$3-\begin{pmatrix} -\ddot{s}-Me \end{pmatrix}$
2481	$3-\begin{pmatrix} -\ddot{\ddot{s}}-Me \end{pmatrix}$	3- (-\$-Ne)
2482	$3 - \begin{pmatrix} 0 \\ -\frac{5}{5} - NH_2 \end{pmatrix}$	(
2483	$3 - \left\{ \begin{array}{c} 0 \\ -\ddot{s} - N \left(Me \right)_{2} \end{array} \right\}$	$ \begin{array}{c} 3 - \\ -\ddot{S} - N \text{ (Me)}_{2} \end{array} $
2484	3-(-F)	4-(-F)
2485	3-(-Cl)	4-(-C1)
2486	4-(-CN)	4-(-CN)
2487	4-(-NO ₂)	4-(-NO ₂)
2488	3-(-Me)	4-(-Me)
2489	4-(-Me)	2,6-di-(-Me)
2490	4-(-CF ₃)	4-(-CF ₃)
2491	4-(-Ac)	4-(-Ac)
2492	4-(-CO ₂ H)	4-(-CO ₂ H)
2493	4-(-CO ₂ Me)	4-(-CO ₂ Me)
2494	4- (- N)	4- (-N)
2495	4-(-CONH ₂)	4-(-CONH ₂)
2496	4-(-CONH ₂)	4-(-F)
2497	4-(-CONH ₂)	2,3,4,5,6-penta-(-F)
2498	4-(-CONH ₂)	4-(-Cl)
2499	4-{-CON (Me) ₂ }	4-{-CON (Me) ₂ }
2500	4-{-CON(Me) ₂ }	4-(-F)
2501	4-{-CON(Me) ₂ }	4-(-C1)

	A (CON (Mo))	3,5-di-(-Cl)
2502	$4-\{-CON(Me)_2\}$	
2503	$4-\{-C (=NH) NH_2\}$	$4 - \{-C (=NH) NH_2\}$
2504	4-(-OMe)	4-(-OMe)
2505	4-(-OMe)	3,4,5-tri-(-OMe)
2506	$_{4}$ - $\left(-0$ - cH_{2} - N $\right)$	4-(-0-CH ₂ -N)
2507	4-(-NHMe)	4-(-NHMe)
2508	4-(-NHAc)	4-(-NHAc)
2509	$4 - \begin{pmatrix} -N $	4- (-N-Ş-Me)
2510	4-(-SMe)	4-(-SMe)
2511	$4-\begin{pmatrix}0\\-\dot{s}-\mathbf{Me}\end{pmatrix}$	4- (-S-Me)
2512	$4 - \begin{pmatrix} 0 \\ -\ddot{s} - Me \\ 0 \end{pmatrix}$	$4-\left(egin{matrix} 0 & -1 & 0 \\ -1 & 0 & 0 \end{smallmatrix} \right)$
2513	$4 - \begin{pmatrix} 0 \\ -5 \\ 0 \end{pmatrix}$	$4 - \begin{pmatrix} 0 \\ -\stackrel{\circ}{\stackrel{\circ}{\stackrel{\circ}{\stackrel{\circ}{\circ}}} - NH_2 \end{pmatrix}$
2514	$4-\left\{ egin{array}{c} 0\\ -\ddot{\ddot{s}}-N\left(Ne ight)_{2} \end{array} ight\}$	4 - { - S-N (Me) 2 }

Table 216

$\begin{array}{c c} & & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\$		
Ex.	R	R'
2515	-H	-н
2516	2-(-F)	3-(-F)
2517	3-(-Cl)	3-(-C1)
2518	3-(-CN)	3-(-CN)
2519	3- (-NO ₂)	3-(-NO ₂)
2520	3-(-Me)	3-(-Me)
2521	3-(-CF ₃)	3-(-CF ₃)
2522	3-(-Ac)	3-(-Ac)
2523	3-(-CO ₂ H)	3-(-CO ₂ H)
2524	3-(-CO ₂ Me)	3-(-CO ₂ Me)
2525	3- (N)	3- (N)
2526	3-(-CONH ₂)	3-(-CONH ₂)
2527	3-(-CONH ₂)	3-(-F)
2528	3-(-CONH ₂)	3-(-C1)
2529	3-{-CON (Me) ₂ }	3-{-CON (Me) ₂ }
2530	3-{-CON (Me) ₂ }	3-(-F)
2531	3-{-CON (Me) ₂ }	3-(-C1)
2532	$3-\{-C(=NH)NH_2\}$	3-{-C(=NH)NH ₂ }
2533	3-(-OMe)	3-(-OMe)
2534	3-(-0-CH ₂ -N-)	$3-\left(-0-CH_{2}^{0}-N\right)$
2535	3-(-NHMe)	3-(-NHMe)
2536	3-(-NHAc)	3-(-NHAc)

2537	3- (-N-S-Me)	3- (-SMe)
2538	3-(-SMe)	i
2539	3- (-S-Me)	3- (- S-Me)
2540	3- (3- (-\$-Ne)
2541	$3-\begin{pmatrix}0\\-\ddot{s}-NH_2\end{pmatrix}$	$\begin{pmatrix} -\ddot{s} - NH_2 \end{pmatrix}$
2542	$3 - \left\{ -\overset{\circ}{\overset{\circ}{\overset{\circ}{\overset{\circ}{\overset{\circ}{\overset{\circ}{\overset{\circ}{\overset{\circ}$	3- 0
2543	3-(-F)	4-(-F)
2544	4-(-Cl)	4-(-C1)
2545	4-(-CN)	4-(-CN)
2546	4-(-NO ₂)	4-(-NO ₂)
2547	4-(-Me)	4-(-Me)
2548	4-(-CF ₃)	4-(-CF ₃)
2549	4-(-Ac)	4-(-Ac)
2550	3- (-CO ₂ H)	4-(-CO ₂ H)
2551	4-(-CO ₂ Me)	4-(-CO ₂ Me)
2552	4- (-N)	4- (-N)
2553	4-(-CONH ₂)	4-(-CONH ₂)
2554	4-(-CONH ₂)	4-(-F)
2555	4-(-CONH ₂)	4-(-Cl)
2556	3-{-CON(Me) ₂ }	4-{-CON (Me) ₂ }
2557	3-{-CON(Me) ₂ }	4-(-F)
2558	4-{-CON (Me) ₂ }	4-(-C1)
2559	4-{-C(=NH)NH ₂ }	4-{-C(=NH)NH ₂ }
2560	4-(-OMe)	4-(-OMe)
2561	$4-\left(-0-CH_{2} - N\right)$	4-(-0-CH ₂ -N-)

2562	4-(-NHMe)	4-(-NHMe)
2563	4-(-NHAc)	4-(-NHAc)
2564	(—N-S-Me) 4 — (—N - S-Me)	$4 - \begin{pmatrix} -N - \overset{0}{\overset{0}{\overset{0}{\overset{0}{\overset{0}{\overset{0}{\overset{0}{\overset{0}$
2565	4-(-SMe)	4-(-SMe)
2566	4 - (- S - Me)	$4-\begin{pmatrix}0\\-\ddot{s}-Me\end{pmatrix}$
2567	$4 - \begin{pmatrix} 0 \\ -\ddot{s} - \mathbf{Me} \\ 0 \end{pmatrix}$	$4-\left(egin{matrix} 0 \\ -\ddot{3} \\ 0 \end{smallmatrix} ight)$
2568	$4 - \begin{pmatrix} 0 \\ -\ddot{s} - NH_2 \end{pmatrix}$	$4 - \begin{pmatrix} 0 \\ -\ddot{s} - NH_2 \end{pmatrix}$
2569	$4 - \left\{ \begin{array}{c} 0 \\ -\ddot{\mathbf{S}} - \mathbf{N} \left(\mathbf{Me} \right)_{2} \end{array} \right\}$	$egin{array}{c} \left\{ egin{array}{c} 0 \\ -\ddot{\ddot{s}} - N \left(\dot{M}e ight)_{_2} \end{array} ight\} \end{array}$

Table 217

$\begin{array}{c c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\$		
		Py: Pyridyl group
Ex. No.	Ру	R'
2570	3-Py	-Н
2571	3-Py	3-(-F)
2572	3-Py	3-(-Cl)
2573	3-Py	3-(-Me)
2574	3-Py	3-(-CF ₃)
2575	3-Py	3-(-Ac)
2576	3-Py	3-(-CO ₂ H)
2577	3-Py	3-(-CO ₂ Me)
2578	3-Py	3- (-N)
2579	3-Py	3-(-CONH ₂)
2580	3-Py	$3-\{-CON(Me)_2\}$
2581	3-Py	4-(-F)
2582	3-Py	4-(-C1)
2583	3-Ру	4-(-Me)
2584	3-Py	4-(-CF ₃)
2585	3-Ру	4-(-Ac)
2586	2-Py	4-(-CO ₂ H)
2587	3-Py	4-(-CO ₂ Me)
2588	3-Py	4- (- N)
2589	4-Py	4-(-CONH ₂)
2590	3-Py	4-{-CON (Me) ₂ }

Table 218

HO_2C Py f		
		Py : Pyridyl group
Ex. No.	Ру	R'
2591	3-Py	-н
2592	3-Py	3-(-F)
2593	3 - Py	3-(-Cl)
2594	3-Ру	3-(-Me)
2595	3-Py	3-(-CF ₃)
2596	3-Py	3-(-Ac)
2597	3-Ру	3- (-CO ₂ H)
2598	3-Py	3-(-CO ₂ Me)
2599	3-Ру	3- (N)
2600	3-Py	3-(-CONH ₂)
2601	3 - Py	3-{-CON (Me) ₂ }
2602	3-Py	4-(-F)
2603	3-Py	4-(-C1)
2604	3-Py	4-(-Me)
2605	3-Py	4-(-CF ₃)
2606	3-Py	4-(-Ac)
2607	3-Py	4-(-CO ₂ H)
2608	3-Py	4-(-CO ₂ Me)
2609	3-Py	4- (-N)
2610	3-Py	4-(-CONH ₂)
2611	3-Py	4-{-CON (Me) ₂ }

Table 219

Example No.	328	1H NMR(δ) ppm
HCI CI HO N N N N N N N N N N N N N N N N N N		300MHz, DMSO-d6 8. 29 (1H, s), 8. 23 (1H, d, J=9. 0 Hz), 8. 02 (1H, d, J=8. 4Hz), 7. 8 0 (1H, s), 7. 71 (2H, d, J=8. 4Hz), 7. 61 (1H, d, J=9. 3Hz), 7. 55-7 . 45 (3H, m), 7. 46 (2H, d, J=8. 1Hz), 7. 22 (2H, d, J=8. 7Hz), 5. 16 (2H, s,), 4. 34 (1H, m), 4. 20-3. 40 (4H, m), 2. 60-2. 15 (6H, m), 2 . 10-1. 90 (2H, m), 1. 85-1. 70 (2 H, m), 1. 65-1. 55 (1H, m), 1. 50-1
Purity > 90%	(NMR)	1. 10 (3H, m)
MS 662 (1	M+1)	

Example No. 3	29 1H NMR(δ) ppm
HCI HO N N N N N N N N N N N N N N N N N N	400MHz, DMSO-d6 9.80(1H, brs), 8.32(1H, s), 8.3 0(1H, d, J=8.8Hz), 8.06(1H, d, J =8.8Hz), 7.74(2H, d, J=8.6Hz), 7.48-7.37(4H, m), 7.22(1H, d, J =8.6Hz), 7.17(1H, d, J=8.2Hz), 7.05(1H, d, J=2.3Hz), 6.88(1H, dd, J=8.3, 2.5Hz), 5.04(2H, s), 4.37(1H, m), 2.37-2.22(2H, m), 2.11-1.98(2H, m), 1.93-1.81(2 H, m), 1.70-1.58(1H, m), 1.56-1
Purity > 90% (NMR)	. 22 (3H, m)
MS 553 (M+1)	

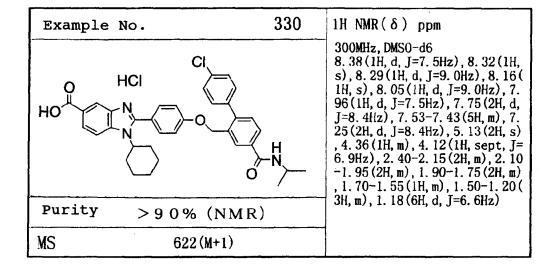


Table 220

Example No.	331	1H NMR(δ) ppm
HCI CI N N N N N N N N N N N N N N N N N	O N	300MHz, DMSO-d6 8. 31 (1H, s), 8. 27 (1H, d, J=8. 7H z), 8. 05 (1H, d, J=8. 7Hz), 7. 75- 7. 41 (9H, m), 7. 23 (2H, d, J=8. 7H z), 4. 36 (1H, m), 4. 00-3. 90 (1H, m), 2. 84 (3H, brs), 2. 40-2. 15 (2 H, m), 2. 10-2. 00 (2H, m), 1. 95-1 . 75 (2H, m), 1. 70-1. 55 (1H, m), 1 . 50-1. 00 (7H, m)
Purity > 90% (NM	IR)	·
MS 636 (M+1)		

Example No.	332	1H NMR(δ) ppm
O HCI HO N	J H	300MHz, DMSO-d6 10. 42(1H, s), 8. 29(1H, s), 8. 27 (1H, s), 8. 10(1H, d, J=7. 9Hz), 8 .03(1H, d, J=8. 6Hz), 7. 82(2H, d .J=7. 5Hz), 7. 73(2H, d, J=8. 7Hz), 7. 56-7. 52(5H, m), 7. 38(2H, t .J=7. 9Hz), 7. 26(2H, d, J=8. 7Hz), 7. 13(1H, t, J=7. 5Hz), 5. 20(2 II, s), 4. 35(1H, br t, J=11. 7Hz), 2. 37-2. 19(2H, m) ,2. 07-1. 96(2H, m), 1. 92-1. 79(
Purity > 9 0 %	(NMR)	2H, m), 1.69-1.58(1H, m), 1.50- 1.20(3H, m)
MS 656	(M+1)	

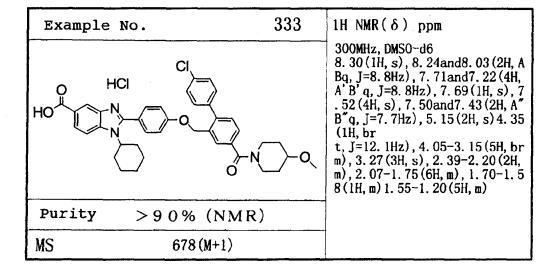


Table 221

Example	No.	334	1H
НО	CI	ОН	300 8.3 d, , , 1.7 =8.7 dd, 4.3 z),
Purity	>90% (NMR)		1.7 H, 1
MS	611 (M+1)		

H NMR(δ) ppm

300MHz, DMSO-d6
8. 22 (1H, d, J=1. 5Hz), 8. 01 (1H, d, J=9. 0Hz), 7. 89 (1H, dd, J=8. 6, 1. 5Hz), 7. 61 (2H, d, J=8. 6Hz), 7. 50-7. 39 (4H, m), 7. 27 (1H, d, J=8. 6Hz), 7. 13 (2H, d, J=8. 6Hz), 7. 04 (1H, dd, J=8. 2, 2. 6Hz), 5. 04 (2H, s), 4. 28 (1H, m), 4. 11 (2H, t, J=6. 3Hz), 3. 57 (2H, t, J=6. 3Hz), 2. 38-2. 17 (2H, m), 2. 00-1. 79 (6H, m), 1. 70-1. 59 (1H, m), 1. 52-1. 16 (3H, m)

Example	No.	335
HO +	HCI CI	∕_он
Purity	>90% (NMR)	
MS	597 (M+1)	

1H NMR(δ) ppm

 $\begin{array}{c} 300 \text{MHz}, \text{DMSO-d6} \\ 8.\ 30\ (1\text{H},\ d,\ J=1.\ 5\text{Hz}),\ 8.\ 27\ (1\text{H},\ d,\ J=9.\ 0\text{Hz}),\ 8.\ 04\ (1\text{H},\ dd,\ J=8.\ 6,\ 1.\ 5\text{Hz}),\ 7.\ 72\ (2\text{H},\ d,\ J=9.\ 0\text{Hz}),\ 7.\ 60-7.\ 40\ (4\text{H},\ m),\ 7.\ 32-7.\ 19\ (4\text{H},\ m),\ 7.\ 06\ (1\text{H},\ dd,\ J=8.\ 6,\ 3.\ 0\text{Hz}),\ 5.\ 08\ (2\text{H},\ s),\ 4.\ 36\ (1\text{H},\ m),\ 4.\ 06\ (2\text{H},\ t,\ J=4.\ 8\text{Hz}),\ 3.\ 74\ (2\text{H},\ t,\ J=4.\ 8\text{Hz}),\ 2.\ 38-2.\ 19\ (2\text{H},\ m),\ 2.\ 13-1.\ 97\ (2\text{H},\ m),\ 1.\ 94-1.\ 78\ (2\text{H},\ m),\ 1.\ 72-1.\ 59\ (1\text{H},\ m),\ 1.\ 52-1.\ 20\ (3\text{H},\ m) \end{array}$

DEMANDE OU BREVET VOLUMINEUX

LA PRÉSENTE PARTIE DE CETTE DEMANDE OU CE BREVET COMPREND PLUS D'UN TOME.

CECI EST LE TOME 1 DE 2 TENANT LES PAGES 1 À 429

NOTE: Pour les tomes additionels, veuillez contacter le Bureau canadien des brevets

JUMBO APPLICATIONS/PATENTS

THIS SECTION OF THE APPLICATION/PATENT CONTAINS MORE THAN ONE VOLUME

THIS IS VOLUME 1 OF 2 CONTAINING PAGES 1 TO 429

NOTE: For additional volumes, please contact the Canadian Patent Office

NOM DU FICHIER / FILE NAME:

NOTE POUR LE TOME / VOLUME NOTE:

WHAT IS CLAIMED IS:

1. A therapeutic agent for hepatitis C, which comprises a fused ring compound of the following formula [I] or a pharmaceutically acceptable salt thereof as an active ingredient:

wherein

5

15

20

25

a broken line is a single bond or a double bond,

 G^1 is $C(-R^1)$ or a nitrogen atom,

 G^2 is $C(-R^2)$ or a nitrogen atom,

10 G^3 is $C(-R^3)$ or a nitrogen atom,

 G^4 is $C(-R^4)$ or a nitrogen atom,

G⁵, G⁶, G⁸ and G⁹ are each independently a carbon atom or a nitrogen atom,

 G^7 is $C(-R^7)$, an oxygen atom, a sulfur atom, or a nitrogen atom optionally substituted by R^8 , wherein R^1 , R^2 , R^3 and R^4 are each independently,

- (1) hydrogen atom,
- (2) C_{1-6} alkanoyl,
- (3) carboxyl,
- (4) cyano,
 - (5) nitro,
 - (6) C_{1-6} alkyl optionally substituted by 1 to 3 substituent(s) selected from the following group A, group A; halogen atom, hydroxyl group, carboxyl, amino, C_{1-6} alkoxy, C_{1-6} alkoxy, C_{1-6} alkoxy, C_{1-6}

alkoxycarbonyl and C_{1-6} alkylamino,

wherein R^{a1} is optionally substituted C₁₋₆ alkyl (as defined above), C₆₋₁₄ aryl C₁₋₆ alkyl optionally substituted by 1 to 5 substituent(s) selected from the following group B or glucuronic acid residue, group B; halogen atom, cyano, nitro, C₁₋₆ alkyl,

halogenated C_{1-6} alkyl, C_{1-6} alkanoyl, $-(CH_2)_r-COOR^{b1}, -(CH_2)_r-CONR^{b1}R^{b2}, -(CH_2)_r-NR^{b1}R^{b2}, \\ -(CH_2)_r-NR^{b1}-COR^{b2}, -(CH_2)_r-NHSO_2R^{b1}, -(CH_2)_r-OR^{b1}, \\ -(CH_2)_r-SR^{b1}, -(CH_2)_r-SO_2R^{b1} \text{ and } -(CH_2)_r-SO_2NR^{b1}R^{b2} \\ \text{wherein } R^{b1} \text{ and } R^{b2} \text{ are each independently} \\ \text{hydrogen atom or } C_{1-6} \text{ alkyl and r is 0 or an integer of 1 to 6,}$

(8) $-CONR^{a2}R^{a3}$

5

10

15

25

30

35

- wherein R^{a2} and R^{a3} are each independently hydrogen atom, C_{1-6} alkoxy or optionally substituted C_{1-6} alkyl (as defined above),
- (9) $-C (=NR^{a4}) NH_2$ wherein R^{a4} is hydrogen atom or hydroxyl group,
- (10) $-NHR^{a5}$ wherein R^{a5} is hydrogen atom, C_{1-6} alkanoyl or C_{1-6} alkylsulfonyl,
- (11) $-OR^{a6}$ wherein R^{a6} is hydrogen atom or optionally substituted C_{1-6} alkyl(as defined above),
- 20 (12) $-SO_2R^{a7}$ wherein R^{a7} is hydroxyl group, amino, C_{1-6} alkylamino,
 - (13) -P (=O) $(OR^{a31})_2$ wherein R^{a31} is hydrogen atom, optionally substituted C_{1-6} alkyl (as defined above) or C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B
 - (14) heterocyclic group having 1 to 4 heteroatom(s)
 selected from an oxygen atom, a nitrogen atom and a
 sulfur atom, and

 R^7 and R^8 are each hydrogen atom or optionally substituted C_{1-6} alkyl (as defined above),

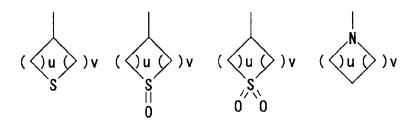
ring Cy is

or

(1) C_{3-8} cycloalkyl optionally substituted by 1 to 5 substituent(s) selected from the following group C, group C; hydroxyl group, halogen atom, C_{1-6} alkyl and C_{1-6} alkoxy,

(2) C_{3-8} cycloalkenyl optionally substituted by 1 to 5 substituent(s) selected from the above group C, or

(3)



wherein u and v are each independently an integer of 1 to 3,

ring A

5

is

- (1) C_{6-14} aryl,
- (2) C_{3-8} cycloalkyl,
- 10 (3) C₃₋₈ cycloalkenyl or
 - (4) heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom,

R⁵ and R⁶ are each independently

15 (1) hydrogen atom,

- (2) halogen atom,
- (3) optionally substituted C_{1-6} alkyl (as defined above) or
- (4) $-OR^{a8}$ wherein R^{a8} is hydrogen atom, C_{1-6} alkyl or C_{6-14} aryl C_{1-6} alkyl, and

Х

20

30

is

- (1) hydrogen atom,
- (2) halogen atom,
- (3) cyano,
- 25 (4) nitro,
 - (5) amino, C_{1-6} alkanoylamino,
 - (6) C_{1-6} alkylsulfonyl,
 - (7) optionally substituted C_{1-6} alkyl (as defined above),
 - (8) C_{2-6} alkenyl optionally substituted by 1 to 3 substituent(s) selected from the above group A,
 - (9) $-COOR^{a9}$ wherein R^{a9} is hydrogen atom or C_{1-6} alkyl,
 - (10) $-CONH-(CH_2)_1-R^{a10}$

wherein R^{a10} is optionally substituted C_{1-6} alkyl (as defined above), C_{1-6} alkoxycarbonyl or C_{1-6} alkanoylamino and l is 0 or an integer of 1 to 6,

 $(11) - OR^{a11}$

wherein R^{all} is hydrogen atom or optionally substituted C_{1-6} alkyl (as defined above)

or

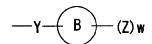
5

15

20

25

(12)



10 wherein

ring B is

- (1') C_{6-14} aryl,
- (2') C₃₋₈ cycloalkyl or
- (3') heterocyclic group (as defined above),
 each Z is independently
 - (1') a group selected from the following group D,
 - (2') C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the following group D,
 - (3') C_{3-8} cycloalkyl optionally substituted by 1 to 5 substituent(s) selected from the following group D,
 - (4') C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the following group D,
 - (5') heterocyclic group optionally substituted by 1
 to 5 substituent(s) selected from the following
 group D,

wherein the heterocyclic group has 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom, or

(6') heterocycle C₁₋₆ alkyl optionally substituted by 1 to 5 substituent(s) selected from the following group D,

wherein the heterocycle C_{1-6} alkyl is C_{1-6} alkyl substituted by heterocyclic group optionally substituted by 1 to 5 substituent(s) selected from the group D, as defined above,

group D:

35

30

- (a) hydrogen atom,
- (b) halogen atom,
- (c) cyano,
- (d) nitro,
- (e) optionally substituted C_{1-6} alkyl (as defined above),
- (f) $-(CH_2)_t-COR^{a18}$,

(hereinafter each t means independently 0 or an integer of 1 to 6),

wherein R^{al8} is

- (1") optionally substituted C_{1-6} alkyl (as defined above),
- (2") C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B or
- (3") heterocyclic group optionally substituted
 by 1 to 5 substituent(s) selected from
 the above group B
 wherein the heterocyclic group has 1 to
 4 heteroatom(s) selected from an oxygen
 atom, a nitrogen atom and a sulfur atom,
- (g) $-(CH_2)_t-COOR^{a19}$ wherein R^{a19} is hydrogen atom, optionally substituted C_{1-6} alkyl (as defined above) or C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B,
- (h) $-(CH_2)_t-CONR^{a27}R^{a28}$ wherein R^{a27} and R^{a28} are each independently, (1") hydrogen atom,
 - (2") optionally substituted C_{1-6} alkyl (as defined above),
 - (3") C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B,
 - (4") C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

10

5

15

20

25

30

	(5") heterocyclic group optionally substituted
	by 1 to 5 substituent(s) selected from the
	above group B,
	(6") heterocycle C_{1-6} alkyl optionally
5	substituted by 1 to 5 substituent(s) selected
	from the above group B,
	wherein the heterocycle C_{1-6} alkyl is C_{1-6} alkyl
	substituted by heterocyclic group optionally
	substituted by 1 to 5 substituent(s) selected
10	from the above group B, as defined above,
	(7") C ₃₋₈ cycloalkyl optionally substituted by 1
	to 5 substituent(s) selected from the above
	group B,
	(8") C_{3-8} cycloalkyl C_{1-6} alkyl optionally
15	substituted by 1 to 5 substituent(s) selected
	from the above group B,
	(9") hydroxyl group or
	(10") C ₁₋₆ alkoxy,
	(i) $-(CH_2)_t-C(=NR^{a33})NH_2$
20	wherein R^{a33} is hydrogen atom, C_{1-6} alkyl,
	hydroxyl group or C_{1-6} alkoxy,
	$(j) - (CH_2)_t - OR^{a20}$
	wherein R ^{a20} is
	(1") hydrogen atom,
25	(2") optionally substituted C_{1-6} alkyl (as
	defined above),
	(3") optionally substituted C_{2-6} alkenyl (as
	defined above),
	(4") C_{2-6} alkynyl optionally substituted by 1
30	to 3 substituent(s) selected from the
	above group A,
	(5") C_{6-14} aryl optionally substituted by 1 to
	5 substituent(s) selected from the above
	group B,
35	(6") C_{6-14} aryl C_{1-6} alkyl optionally
	substituted by 1 to 5 substituent(s)
	selected from the above group B, (7") heterocyclic group optionally substituted
	(\") Hereroclerre droup obcronarry substituted

	by 1 to 5 substituent(s) selected from
	the above group B,
	(8") heterocycle C_{1-6} alkyl optionally
	substituted by 1 to 5 substituent(s)
5	selected from the above group B,
	(9") C_{3-8} cycloalkyl optionally substituted by
	1 to 5 substituent(s) selected from the
	above group B, or
	(10") C_{3-8} cycloalkyl C_{1-6} alkyl optionally
10	substituted by 1 to 5 substituent(s)
	selected from the above group B,
	(k) $-(CH_2)_t-O-(CH_2)_p-COR^{a21}$
	wherein R^{a21} is amino, C_{1-6} alkylamino or
	heterocyclic group optionally substituted by
15	1 to 5 substituent(s) selected from the above
	group B, and p is 0 or an integer of 1 to 6,
	(1) $-(CH_2)_t-NR^{a22}R^{a23}$
	wherein R^{a22} and R^{a23} are each independently
	(1") hydrogen atom,
20	(2") optionally substituted C_{1-6} alkyl (as
	defined above),
	(3") C_{6-14} aryl optionally substituted by 1 to
	5 substituent(s) selected from the above
	group B,
25	(4") C_{6-14} aryl C_{1-6} alkyl optionally
	substituted by 1 to 5 substituent(s)
	selected from the above group B,
	(5") heterocycle C_{1-6} alkyl optionally
	substituted by 1 to 5 substituent(s)
30	selected from the above group B or
	<pre>(6") heterocyclic group optionally</pre>
	substituted by 1 to 5 substituent(s)
	selected from the above group B,
	(m) $-(CH_2)_t - NR^{a29}CO - R^{a24}$
35	wherein R^{a29} is hydrogen atom, C_{1-6} alkyl or C_{1-6}
	alkanoyl, and R ^{a24} is
	(1") amino,
	(2") C ₁₋₆ alkylamino,

(3") optionally substituted C_{1-6} alkyl (as defined above), (4") C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above 5 group B, (5") heterocyclic group optionally substituted by 1 to 5 substituent(s) selected from the above group B or (6") heterocycle C₁₋₆ alkyl optionally substituted by 1 to 5 substituent(s) 10 selected from the above group B, (n) $-(CH_2)_+-NR^{a29}SO_2-R^{a25}$ wherein Ra29 is as defined above, and R^{a25} is hydrogen atom, optionally substituted C_{1-6} alkyl (as defined above), 15 C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B or heterocyclic group optionally substituted by 1 to 5 substituent(s) selected from the above group B, 20 (o) $-(CH_2)_t-S(O)_q-R^{a25}$ wherein R^{a25} is as defined above, and q is 0, 1 or 2, (p) $-(CH_2)_t-SO_2-NHR^{a26}$ wherein R^{a26} is hydrogen atom, optionally 25 substituted C_{1-6} alkyl (as defined above), C₆₋₁₄ aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B or heterocyclic group optionally substituted by 1 to 5 substituent(s) selected 30 from the above group B, and (q) heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom, and 35 w is an integer of 1 to 3, and

(1') a single bond,

Y is

```
(2') C_{1-6} alkylene,
                        (3') C_{2-6} alkenylene,
                        (4') - (CH<sub>2</sub>)<sub>m</sub>-O-(CH<sub>2</sub>)<sub>n</sub>-,
                             (hereinafter m and n are each independently 0
                             or an integer of 1 to 6),
5
                        (5') -CO-,
                        (6') -CO_2 - (CH_2)_n - ,
                        (7') -CONH-(CH_2)_n-NH-,
                        (8') -NHCO<sub>2</sub>-,
                        (9') -NHCONH-,
10
                        (10) -O - (CH<sub>2</sub>)<sub>n</sub> -CO -,
                        (11') -O-(CH_2)_n-O-,
                        (12') -SO<sub>2</sub>-,
                        (13') - (CH_2)_m - NR^{a12} - (CH_2)_n -
                             wherein Rall is
15
                             (1") hydrogen atom,
                             (2") optionally substituted C_{1-6} alkyl (as
                                   defined above),
                             (3") C_{6-14} aryl C_{1-6} alkyl optionally
                                     substituted by 1 to 5 substituent(s)
20
                                     selected from the above group B,
                             (4") C_{6-14} aryl optionally substituted by 1 to
                                     5 substituent(s) selected from the above
                                    group B,
                             (5") -COR<sup>b5</sup>
25
                                   wherein R<sup>b5</sup> is hydrogen atom, optionally
                                   substituted C_{1-6} alkyl (as defined above),
                                   C_{6-14} aryl optionally substituted by 1 to
                                   5 substituent(s) selected from the above
                                   group B or C_{6-14} aryl C_{1-6} alkyl optionally
30
                                   substituted by 1 to 5 substituent(s)
                                   selected from the above group B,
                             (6") -COOR<sup>b5</sup> (R<sup>b5</sup> is as defined above) or
                             (7") -SO<sub>2</sub>R<sup>b5</sup> (R<sup>b5</sup> is as defined above),
                        (14') -NR^{a12}CO- (R^{a12} is as defined above),
35
                        (15') -CONR^{a13} - (CH_2)_n -
                              wherein R<sup>al3</sup> is hydrogen atom, optionally
```

substituted C_{1-6} alkyl (as defined above) or

 C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(16') -CONH-CHR^{a14}-

5

10

15

20

25

30

35

wherein R^{a14} is C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B,

(17') $-O-(CH_2)_m-CR^{a15}R^{a16}-(CH_2)_n-$ wherein R^{a15} and R^{a16} are each independently

(1") hydrogen atom,

(2") carboxyl,

(3") C_{1-6} alkyl,

 $(4") - OR^{b6}$

wherein R^{b6} is C_{1-6} alkyl or C_{6-14} aryl C_{1-6} alkyl, or

(5") -NHR^{b7}

wherein R^{b7} is hydrogen atom, C_{1-6} alkyl, C_{1-6} alkanoyl or C_{6-14} aryl C_{1-6} alkyloxycarbonyl, or R^{a15} is optionally

(6")

$$-(CH_2)_{n'} - B' - (Z') w'$$

wherein n', ring B', Z' and w' are the same as the above-mentioned n, ring B, Z and w, respectively, and may be the same as or different from the respective counterparts,

(18') $-(CH_2)_n-NR^{a12}-CHR^{a15}-(R^{a12})$ and R^{a15} are each as defined above),

 $(19') - NR^{a17}SO_2 -$

wherein R^{a17} is hydrogen atom or C_{1-6} alkyl,

(20') $-S(O)_e - (CH_2)_m - CR^{a15}R^{a16} - (CH_2)_n - (e is 0, 1 or 2, R^{a15})$ and R^{a16} are each as defined above),

or

(21') $-(CH_2)_m-CR^{a15}R^{a16}-(CH_2)_n-(R^{a15})$ and R^{a16} are each as defined above).

2. The therapeutic agent of claim 1, wherein 1 to 4 of the G^1 , G^2 , G^3 , G^4 , G^5 , G^6 , G^7 , G^8 and G^9 is (are) a nitrogen atom.

- 3. The therapeutic agent of claim 2, wherein G^2 is $C(-R^2)$ and G^6 is a carbon atom.
- 5 4. The therapeutic agent of claim 2 or claim 3, wherein \mathbf{G}^5 is a nitrogen atom.
 - 5. The therapeutic agent of claim 1, wherein, in formula [I], the moiety

$$G^{2}$$
 G^{1}
 G^{8}
 G^{9}
 G^{5}
 G^{6}

10

is a fused ring selected from $\,$

6. The therapeutic agent of claim 5, wherein, in formula [I], the moiety

is a fused ring selected from

7. The therapeutic agent of claim 6, which comprises a fused ring compound of the following formula [I-1]

wherein each symbol is as defined in claim 1, or a pharmaceutically acceptable salt thereof as an active ingredient.

5

10 8. The therapeutic agent of claim 6, which comprises a fused ring compound of the following formula [I-2]

$$\begin{array}{c|c}
R^2 & & \\
\hline
R^3 & & \\
\hline
R^4 & & \\
\hline
Cy & & \\
\end{array}$$

$$\begin{array}{c|c}
R^5 \\
\hline
R^6 & \\
\end{array}$$
[1-2]

wherein each symbol is as defined in claim 1, or a pharmaceutically acceptable salt thereof as an active ingredient.

9. The therapeutic agent of claim 6, which comprises a fused ring compound of the following formula [I-3]

$$\begin{array}{c|c}
R^2 & & \\
\hline
 R^3 & & \\
\hline
 N & & \\
\hline
 R^5 & & \\
\hline
 R^6 & & \\
\hline
 Cy & & \\
\hline
 Cy & & \\
\hline
 R^6 & & \\
\hline
 Cy & & \\
\hline
 R^6 & & \\
\hline
 R^7 &$$

wherein each symbol is as defined in claim 1, or a pharmaceutically acceptable salt thereof as an active ingredient.

10. The therapeutic agent of claim 6, which comprises a fused ring compound of the following formula [I-4]

$$\begin{array}{c|c}
R^2 & R^5 \\
R^3 & R^4 & Cy
\end{array}$$

$$\begin{array}{c|c}
R^5 & [1-4]
\end{array}$$

wherein each symbol is as defined in claim 1,

or a pharmaceutically acceptable salt thereof as an active ingredient.

11. The therapeutic agent of any of claims 1 to 10, wherein at least one of R^1 , R^2 , R^3 and R^4 is carboxyl, $-\text{COOR}^{a1}$, $-\text{CONR}^{a2}R^{a3}$, 15 $-\text{SO}_2R^{a7}$ (wherein R^{a1} , R^{a2} , R^{a3} and R^{a7} are as defined in claim 1),

12. The therapeutic agent of claim 11, wherein at least one of R^1 , R^2 , R^3 and R^4 is carboxyl, $-COOR^{a1}$, $-CONR^{a2}R^{a3}$ or $-SO_2R^{a7}$ wherein R^{a1} , 20 R^{a2} , R^{a3} and R^{a7} are as defined in claim 1.

- 13. The therapeutic agent of any of claims 1 to 10, wherein at least one of R^1 , R^2 , R^3 and R^4 is $-\text{COOR}^{a1}$ wherein R^{a1} is glucuronic acid residue.
- 5 14. The therapeutic agent of any of claims 1 to 10, wherein at least one of R^1 , R^2 , R^3 and R^4 is heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom.
- 10 15. The therapeutic agent of any of claims 1 to 14, wherein the ring Cy is cyclopentyl, cyclohexyl, cycloheptyl, tetrahydrothiopyranyl or piperidino.
- 16. The therapeutic agent of any of claims 1 to 14, wherein the ring Cy is

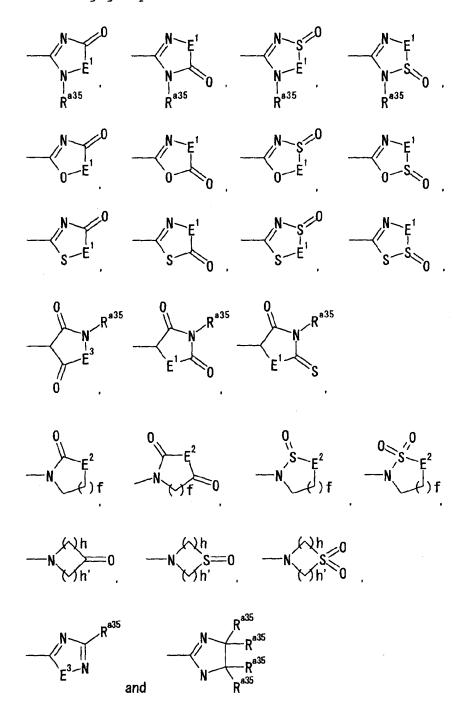


wherein each symbol is as defined in claim 1.

- 17. The therapeutic agent of any of claims 1 to 16, wherein the 20 ring A is C_{6-14} aryl.
 - 18. The therapeutic agent of any of claims 1 to 17, wherein at least one substituent optionally substituted by group A is a substituted by C_{1-6} alkoxy C_{1-6} alkoxy.

- 19. The therapeutic agent of any of claims 1 to 18, wherein the Y is $-(CH_2)_m-CR^{a15}R^{a16}-(CH_2)_n$ wherein each symbol is as defined in claim 1.
- 30 20. The therapeutic agent of any of claims 1 to 19, wherein at least one group represented by Z is heterocycle C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the group D.

21. The therapeutic agent of any of claims 1 to 19, wherein at least one group represented by Z is a heterocyclic group optionally substituted by 1 to 5 substituent(s) selected from the group D, wherein said heterocyclic group is selected from the following groups:



10 wherein E^1 is an oxygen atom, a sulfur atom or $N(-R^{a35})$, E^2 is an oxygen atom, CH_2 or $N(-R^{a35})$, E^3 is an oxygen atom or a sulfur atom,

wherein each R^{a35} is independently hydrogen atom or C_{1-6} alkyl, f is an integer of 1 to 3, and h and h' are the same or different and each is an integer of 1 to 3.

22. The therapeutic agent of claim 21, wherein at least one group 5 represented by Z is heterocyclic group optionally substituted by 1 to 5 substituent(s) selected from the group D wherein said heterocyclic group is selected from the following groups:

- 10 wherein each symbol is as defined in claim 21.
- 23. The therapeutic agent of any of claims 1 to 19, wherein at least one group represented by group D is $-(CH_2)_t-CONR^{a27}R^{a28}$ wherein each symbol is as defined in claim 1, and at least one of R^{a27} and R^{a28} is C_{1-6} alkoxy.
- 24. The therapeutic agent of any of claims 1 to 19, wherein at least one group represented by group D is $-(CH_2)_t-C(=NR^{a33})NH_2$ wherein each symbol is as defined in claim 1, and R^{a33} is hydroxyl group or C_{1-6} alkoxy.
 - 25. The therapeutic agent of any of claims 1 to 19, wherein at least one group represented by group D is $-(CH_2)_t-0-(CH_2)_p-COR^{a21}$, wherein each symbol is as defined in claim 1, and R^{a21} is amino.
 - 26. The therapeutic agent of any of claims 1 to 19, wherein at least one group represented by group D is $-(CH_2)_t-NR^{a29}CO-R^{a24}$ wherein each symbol is as defined in claim 1, and R^{a24} is amino or C_{1-6} alkylamino.
 - 27. The therapeutic agent of any of claims 1 to 19, wherein at least one group represented by group D is $-(CH_2)_t-NR^{a22}R^{a23}$ wherein each symbol is as defined in claim 1, and at least one of R^{a22} and

 R^{a23} is heterocyclic group optionally substituted by 1 to 5 substituent(s) selected from the group B.

- 28. The therapeutic agent of any of claims 1 to 19, wherein at least one group represented by group D is heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom.
 - 29. A fused ring compound of the following formula [II]

10

wherein the moiety

is a fused ring selected from

15

wherein R^1 , R^2 , R^3 and R^4 are each independently,

- (1) hydrogen atom,
- (2) C_{1-6} alkanoyl,
- (3) carboxyl,

20

- (4) cyano,
- (5) nitro,
- (6) C₁₋₆ alkyl optionally substituted by 1 to 3 substituent(s) selected from the following group A, group A; halogen atom, hydroxyl group, carboxyl, amino,

 C_{1-6} alkoxy, C_{1-6} alkoxy C_{1-6} alkoxy, C_{1-6}

alkoxycarbonyl and C_{1-6} alkylamino,

- wherein R^{a1} is optionally substituted C₁₋₆ alkyl (as defined above), C₆₋₁₄ aryl C₁₋₆ alkyl optionally substituted by 1 to 5 substituent(s) selected from the following group B or glucuronic acid residue, group B; halogen atom, cyano, nitro, C₁₋₆ alkyl, halogenated C₁₋₆ alkyl, C₁₋₆ alkanoyl, -(CH₂)_r-COOR^{b1}, -(CH₂)_r-CONR^{b1}R^{b2}, -(CH₂)_r-NR^{b1}R^{b2}, -(CH₂)_r-NR^{b1}-COR^{b2}, -(CH₂)_r-NHSO₂R^{b1}, -(CH₂)_r-SO₂NR^{b1}R^{b2} wherein R^{b1} and R^{b2} are each independently hydrogen atom or C₁₋₆ alkyl and r is 0 or an integer of 1 to 6,
- 15 (8) $-\text{CONR}^{a2}\text{R}^{a3}$ wherein R^{a2} and R^{a3} are each independently hydrogen atom, C_{1-6} alkoxy or optionally substituted C_{1-6} alkyl (as defined above),
 - (9) $-C (=NR^{a4}) NH_2$ wherein R^{a4} is hydrogen atom or hydroxyl group,

20

25

- (10) $-NHR^{a5}$ wherein R^{a5} is hydrogen atom, C_{1-6} alkanoyl or C_{1-6} alkylsulfonyl,
- (11) $-OR^{a6}$ wherein R^{a6} is hydrogen atom or optionally substituted C_{1-6} alkyl (as defined above),
- (12) $-SO_2R^{a7}$ wherein R^{a7} is hydroxyl group, amino, C_{1-6} alkyl or C_{1-6} alkylamino,
- 30 (13) $-P(=0) (OR^{a31})_2$ wherein R^{a31} is hydrogen atom, optionally substituted C_{1-6} alkyl (as defined above) or C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B,
- (14) heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom, and

 R^7 is hydrogen atom or optionally substitute C_{1-6} alkyl (as defined above),

ring Cy' is

5

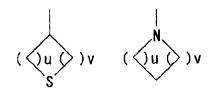
10

25

30

(1) C_{3-8} cycloalkyl optionally substituted by 1 to 5 substituent(s) selected from the following group C, group C; hydroxyl group, halogen atom, C_{1-6} alkyl and C_{1-6} alkoxy, or

(2)



wherein u and v are each independently an integer of 1 to 3,

ring A' is a group selected from a group consisting of phenyl, pyridyl, pyrazinyl, pyrimidinyl, pyridazinyl, cyclohexyl, cyclohexenyl, furyl and thienyl,

15 R^{5'} and R^{6'} are each independently

- (1) hydrogen atom,
- (2) halogen atom,
- (3) optionally substituted C_{1-6} alkyl (as defined above) or
- (4) hydroxyl group

20 ring B is

- (1) C_{6-14} aryl,
- (2) C₃₋₈ cycloalkyl or
- (3) heterocyclic group having 1 to 4 heteroatom(s). selected from an oxygen atom, a nitrogen atom and a sulfur atom,

each Z is independently

- (1) a group selected from the following group D,
- (2) C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the following group D,
- (3) C_{3-8} cycloalkyl optionally substituted by 1 to 5 substituent(s) selected from the following group D,
 - (4) C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the following group D,
- (5) heterocyclic group optionally substituted by 1 to 5 substituent(s) selected from the following group D

- wherein the heterocyclic group has 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom, or
- (6) heterocycle C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the following group D wherein the heterocycle C_{1-6} alkyl is C_{1-6} alkyl substituted by heterocyclic group optionally substituted by 1 to 5 substituent(s) selected from the group D, as defined above, group D:
 - (a) hydrogen atom,
 - (b) halogen atom,

wherein Ral8 is

- (c) cyano,
- (d) nitro,
- (e) optionally substituted C_{1-6} alkyl (as defined above),
- (f) $-(CH_2)_t-COR^{a18}$, (hereinafter each t means independently 0 or an integer of 1 to 6),
 - (1') optionally substituted C_{1-6} alkyl (as defined above),
 - (2') C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B or
 - (3') heterocyclic group optionally substituted
 by 1 to 5 substituent(s) selected from
 the above group B
 wherein the heterocyclic group has 1 to
 4 heteroatom(s) selected from an oxygen
 atom, a nitrogen atom and a sulfur atom,
 - $(g) (CH_2)_t COOR^{a19}$ wherein R^{a19} is hydrogen atom, optionally substituted C_{1-6} alkyl (as defined above) or C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B,
 - (h) $-(CH_2)_t-CONR^{a27}R^{a28}$

20

5

10

15

25

30

	wherein R^{a27} and R^{a28} are each independently,
	(1') hydrogen atom,
	(2') optionally substituted C_{1-6} alkyl (as defined above),
5	(3') C ₆₋₁₄ aryl optionally substituted by 1 to 5 substituent(s) selected from the above group B,
	(4') C_{6-14} aryl C_{1-6} alkyl optionally substituted
	by 1 to 5 substituent(s) selected from the
10	above group B,
	(5') heterocyclic group optionally substituted
	by 1 to 5 substituent(s) selected from the
	above group B,
	(6') heterocycle C_{1-6} alkyl optionally
15	substituted by 1 to 5 substituent(s) selected
	from the above group B,
	wherein the heterocycle C_{1-6} alkyl is C_{1-6} alkyl
	substituted by heterocyclic group optionally
	substituted by 1 to 5 substituent(s) selected
20	from the above group B, as defined above,
	(7') C ₃₋₈ cycloalkyl optionally substituted by 1
	to 5 substituent(s) selected from the above
	group B,
	(8') C ₃₋₈ cycloalkyl C ₁₋₆ alkyl optionally
25	substituted by 1 to 5 substituent(s) selected
	from the above group B, (9') hydroxyl group or
	(10') C_{1-6} alkoxy, (i) $-(CH_2)_+-C (=NR^{a33}) NH_2$
30	wherein R^{a33} is hydrogen atom, C_{1-6} alkyl,
30	hydroxyl group or C_{1-6} alkoxy,
	(j) - (CH2)t - ORa20
	wherein R ^{a20} is
	(1') hydrogen atom,
<i>35</i>	(2') optionally substituted C_{1-6} alkyl (as
	defined above),
	(3') optionally substituted C_{2-6} alkenyl (as
	defined above),

	(4') C_{2-6} alkynyl optionally substituted by 1 to 3 substituent(s) selected from the
	above group A,
	(5') C_{6-14} aryl optionally substituted by 1 to
5	5 substituent(s) selected from the above
	group B,
	(6') C_{6-14} aryl C_{1-6} alkyl optionally
	substituted by 1 to 5 substituent(s)
	selected from the above group B,
10	(7') heterocyclic group optionally substituted
	by 1 to 5 substituent(s) selected from
	the above group B,
	(8') heterocycle C_{1-6} alkyl optionally
	substituted by 1 to 5 substituent(s)
15	selected from the above group B,
	$(9')$ C_{3-8} cycloalkyl optionally substituted by
	1 to 5 substituent(s) selected from the
	above group B, or
	(10') C_{3-8} cycloalkyl C_{1-6} alkyl optionally
20	substituted by 1 to 5 substituent(s)
	selected from the above group B,
	(k) $-(CH_2)_t-O-(CH_2)_p-COR^{a21}$
	wherein R^{a21} is amino, C_{1-6} alkylamino or
	heterocyclic group optionally substituted by
25	1 to 5 substituent(s) selected from the above
	group B,
	and p is 0 or an integer of 1 to 6,
	(1) $-(CH_2)_t-NR^{a22}R^{a23}$
	wherein R^{a22} and R^{a23} are each independently
30	(1') hydrogen atom,
	(2') optionally substituted C_{1-6} alkyl (as
	defined above),
	(3') C_{6-14} aryl optionally substituted by 1 to
	5 substituent(s) selected from the above
35	group B,
	(4') C_{6-14} aryl C_{1-6} alkyl optionally
	substituted by 1 to 5 substituent(s)
	selected from the above group B,

	(5) neterocycle C_{1-6} alkyl optionally
	substituted by 1 to 5 substituent(s)
	selected from the above group B or
	<pre>(6') heterocyclic group optionally</pre>
5	substituted by 1 to 5 substituent(s)
	selected from the above group B,
	$(m) - (CH_2)_t - NR^{a29}CO - R^{a24}$
	wherein R^{a29} is hydrogen atom, C_{1-6} alkyl or C_{1-6}
	alkanoyl, and
10	R^{a24} is
	(1') amino,
	(2') C ₁₋₆ alkylamino,
	$(3')$ optionally substituted C_{1-6}
	alkyl (as defined above),
15	(4') C_{6-14} aryl optionally substituted by 1 to
	5 substituent(s) selected from the above
	group B,
	(5') heterocyclic group optionally
	substituted by 1 to 5 substituent(s)
20	selected from the above group B, or
	(6') heterocycle C_{1-6} alkyl optionally
	substituted by 1 to 5 substituent(s)
	selected from the above group B,
	(n) $-(CH_2)_t-NR^{a29}SO_2-R^{a25}$
25	wherein R^{a29} is as defined above, and
	R ^{a25} is hydrogen atom, optionally
	substituted C_{1-6} alkyl (as defined above),
	C_{6-14} aryl optionally substituted by 1 to 5
	substituent(s) selected from the above group
30	В
	or heterocyclic group optionally substituted
	by 1 to 5 substituent(s) selected from the
	above group B,
	(o) $-(CH_2)_t-S(O)_q-R^{a25}$
35	wherein R^{a25} is as defined above, and q is 0, 1
	or 2,
	(p) $-(CH_2)_t-SO_2-NHR^{a26}$
	wherein R ^{a26} is hydrogen atom, optionally

substituted C_{1-6} alkyl (as defined above), C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above group В or heterocyclic group optionally substituted 5 by 1 to 5 substituent(s) selected from the above group B, and (q) heterocyclic group having 1 to 4 heteroatom(s) 10 selected from an oxygen atom, a nitrogen atom and a sulfur atom, is an integer of 1 to 3, and W Y is (1) a single bond, 15 (2) C_{1-6} alkylene, (3) C_{2-6} alkenylene, (4) - (CH₂)_m-O-(CH₂)_n-,(hereinafter m and n are each independently 0 or an integer of 1 to 6), 20 (5) - CO - ,(6) $-CO_2-(CH_2)_{n-1}$ (7) $-CONH-(CH_2)_p-NH-$, (8) $-NHCO_2-$, (9) -NHCONH-, (10) $-O-(CH_2)_n-CO-$, 25 (11) -O- $(CH_2)_p$ -O-, $(12) -SO_2-,$ (13) $-(CH_2)_m - NR^{a12} - (CH_2)_n$ wherein Rall is (1') hydrogen atom, 30 (2') optionally substituted C_{1-6} alkyl (as defined above), (3') C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B, 35 (4') C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above

group B,

(5') -COR^{b5} wherein R^{b5} is hydrogen atom, optionally substituted C_{1-6} alkyl (as defined above), C_{6-14} aryl optionally substituted by 1 to 5 substituent(s) selected from the above 5 group B or C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B, (6') -COOR^{b5} (R^{b5} is as defined above) or 10 (7') -SO₂R^{b5} (R^{b5} is as defined above). (14) $-NR^{a12}CO-$ (R^{a12} is as defined above), (15) $-CONR^{a13} - (CH_2)_p$ wherein R^{a13} is hydrogen atom, optionally 15 substituted C_{1-6} alkyl (as defined above) or C_{6-14} aryl C_{1-6} alkyl optionally substituted by 1 to 5 substituent(s) selected from the above group B, (16) -CONH-CHR^{a14}wherein R^{al4} is C_{6-14} aryl optionally 20 substituted by 1 to 5 substituent(s) selected from the above group B, (17) $-O-(CH_2)_m-CR^{a15}R^{a16}-(CH_2)_n$ wherein Rals and Rals are each independently (1') hydrogen atom, 25 (2') carboxyl, (3') C_{1-6} alkyl, (4') -OR^{b6} wherein R^{b6} is C_{1-6} alkyl or C_{6-14} aryl C_{1-6} alkyl, 30 (5') -NHR^{b7} wherein R^{b7} is hydrogen atom, C_{1-6} alkyl, C_{1-6} alkanoyl or C_{6-14} aryl C_{1-6} alkyloxycarbonyl, or R^{a15} is optionally 35 (**6**')

wherein n', ring B', Z' and w' are the same as the above-mentioned n, ring B, Z and w, respectively, and may be the same as or different from the respective counterparts,

(18) $-(CH_2)_n-NR^{a12}-CHR^{a15}-(R^{a12} \text{ and } R^{a15} \text{ are each as defined above),}$

(19) $-NR^{a17}SO_2-$ wherein R^{a17} is hydrogen atom or C_{1-6} alkyl,

(20) $-S(O)_e - (CH_2)_m - CR^{a15}R^{a16} - (CH_2)_n - (e is 0, 1 or 2, R^{a15})$ and R^{a16} are each as defined above),

or

(21) $-(CH_2)_m-CR^{a15}R^{a16}-(CH_2)_n-(R^{a15})$ and R^{a16} are each as defined above),

or a pharmaceutically acceptable salt thereof.

15

10

5

30. The fused ring compound of claim 29, which is represented by the following formula [II-1]

$$R^2$$
 R^3
 R^4
 Cy'
 R^5
 R^5
 R^6
 R^6
 R^6
 R^6
 R^7
 R^6
 R^6
 R^6

wherein each symbol is as defined in claim 29, or a pharmaceutically acceptable salt thereof.

31. The fused ring compound of claim 29, which is represented by the following formula [II-2]

$$R^2$$
 R^3
 R^4
 Cy'
 $R^{5'}$
 $R^{6'}$
 $R^{6'}$
 $R^{6'}$
 $R^{6'}$
 $R^{6'}$

25 wherein each symbol is as defined in claim 29, or a pharmaceutically acceptable salt thereof. 32. The fused ring compound of claim 29, which is represented by the following formula [II-3]

$$R^2$$
 N
 N
 R^5
 R^5
 R^6
 R^6
 R^6
 R^6
 R^6
 R^6

- 5 wherein each symbol is as defined in claim 29, or a pharmaceutically acceptable salt thereof.
 - 33. The fused ring compound of claim 29, which is represented by the following formula [II-4]

$$R^2$$
 R^3
 N
 $R^{5'}$
 $R^{6'}$
 $R^{6'}$
 $R^{6'}$
 $R^{6'}$

10

wherein each symbol is as defined in claim 29, or a pharmaceutically acceptable salt thereof.

34. The fused ring compound of any of claims 29 to 33, wherein at least one of R^1 , R^2 , R^3 and R^4 is carboxyl, $-\text{COOR}^{a1}$, $-\text{CONR}^{a2}R^{a3}$, $-\text{SO}_2R^{a7}$ (wherein R^{a1} , R^{a2} , R^{a3} and R^{a7} are as defined in claim 29),

or a pharmaceutically acceptable salt thereof.

20 35. The fused ring compound of claim 34, wherein at least one of R^1 , R^2 , R^3 and R^4 is carboxyl, $-COOR^{a1}$ or $-SO_2R^{a7}$ wherein R^{a1} and R^{a7} are as defined in claim 29, or a pharmaceutically acceptable salt thereof.

- 36. The fused ring compound of claim 35, wherein at least one of R^1 , R^2 , R^3 and R^4 is carboxyl or $-\text{COOR}^{a1}$ wherein R^{a1} is as defined in claim 29, or a pharmaceutically acceptable salt thereof.
- 37. The fused ring compound of claim 36, wherein R^2 is carboxyl and R^1 , R^3 and R^4 are hydrogen atoms, or a pharmaceutically acceptable salt thereof.
- 10 38. The fused ring compound of any of claims 29 to 33, wherein at least one of R^1 , R^2 , R^3 and R^4 is $-COOR^{a1}$ wherein R^{a1} is glucuronic acid residue, or a pharmaceutically acceptable salt thereof.
- 39. The fused ring compound of any of claims 29 to 33, wherein at least one of R^1 , R^2 , R^3 and R^4 is heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom, or a pharmaceutically acceptable salt thereof.
- 40. The fused ring compound of any of claims 29 to 39, wherein the ring Cy' is cyclopentyl, cyclohexyl, cycloheptyl or tetrahydrothiopyranyl, or a pharmaceutically acceptable salt thereof.
- 41. The fused ring compound of claim 40, wherein the ring Cy' is cyclopentyl, cyclohexyl or cycloheptyl, or a pharmaceutically acceptable salt thereof.
 - 42. The fused ring compound of any of claims 29 to 39, wherein the ring Cy' is



30

wherein each symbol is as defined in claim 29, or a pharmaceutically acceptable salt thereof.

- 43. The fused ring compound of any of claims 29 to 42, wherein the ring A' is phenyl, pyridyl, pyrazinyl, pyrimidinyl or pyridazinyl, or a pharmaceutically acceptable salt thereof.
- 5 44. The fused ring compound of claim 43, wherein the ring A' is phenyl or pyridyl, or a pharmaceutically acceptable salt thereof.
 - 45. The fused ring compound of claim 44, wherein the ring A' is phenyl, or a pharmaceutically acceptable salt thereof.

10

15

- 46. The fused ring compound of any of claims 29 to 45, wherein at least one substituent optionaly substituted by group A is a substituent substituted by C_{1-6} alkoxy C_{1-6} alkoxy, or a pharmaceutically acceptable salt thereof.
- 47. The fused ring compound of any of claims 29 to 46, wherein the Y is $-(CH_2)_m-O-(CH_2)_n-$, $-NHCO_2-$, $-CONH-CHR^{a14}-$, $-(CH_2)_m-NR^{a12}-(CH_2)_n-$, $-CONR^{a13}-(CH_2)_n-$, $-O-(CH_2)_m-CR^{a15}R^{a16}-(CH_2)_n-$ or $-(CH_2)_n-NR^{a12}-CHR^{a15}-$ (wherein each symbol is as defined in claim 29), or a pharmaceutically acceptable salt thereof.
- 48. The fused ring compound of claim 47, wherein the Y is $-(CH_2)_m-O-(CH_2)_n-$ or $-O-(CH_2)_m-CR^{a15}R^{a16}-(CH_2)_n-$ (wherein each symbol is as defined in claim 29), or a pharmaceutically acceptable salt thereof.
 - 49. The fused ring compound of claim 48, wherein the Y is $-(CH_2)_m-O-(CH_2)_n$ wherein each symbol is as defined in claim 29, or a pharmaceutically acceptable salt thereof.
 - 50. The fused ring compound of any of claims 29 to 46, wherein the Y is $-(CH_2)_m-CR^{a15}R^{a16}-(CH_2)_n-$ (wherein each symbol is as defined in claim 29), or a pharmaceutically acceptable salt thereof.
- 55. The fused ring compound of any of claims 29 to 50, wherein the R^2 is carboxyl, R^1 , R^3 and R^4 are hydrogen atoms, the ring Cy' is cyclopentyl, cyclohexyl or cycloheptyl, and the ring A' is phenyl, or a pharmaceutically acceptable salt thereof.

- 52. The fused ring compound of any of claims 29 to 51, wherein at least one group represented by Z is heterocycle C₁₋₆ alkyl optionally substituted by 1 to 5 substituent(s) selected from the group D, or a pharmaceutically acceptable salt thereof.
- 53. The fused ring compound of any of claims 29 to 51, wherein at least one group represented by Z is heterocyclic group optionally substituted by 1 to 5 substituent(s) selected from the group D, wherein said heterocyclic group is selected from the following groups:

$$- \bigvee_{E^{3} - N}^{R^{a35}} \bigcap_{R^{a35}}^{R^{a35}} \bigcap_{R^{a35}}^{R^{a35}}$$

wherein E^1 is an oxygen atom, a sulfur atom or $N(-R^{a35})$, E^2 is an oxygen atom, CH_2 or $N(-R^{a35})$, E^3 is an oxygen atom or a sulfur atom, wherein each R^{a35} is independently hydrogen atom or C_{1-6} alkyl, f is an integer of 1 to 3, and h and h' are the same or different and each is an integer of 1 to 3, or a pharmaceutically acceptable salt thereof.

54. The fused ring compound of claim 53, wherein at least one group represented by Z is heterocyclic group optionally substituted by 1 to 5 substituent(s) selected from the group D, wherein said heterocyclic group is selected from the following groups:

- 15 wherein each symbol is as defined in claim 53, or a pharmaceutically acceptable salt thereof.
- 55. The fused ring compound of claim any of claims 29 to 51, wherein at least one group represented by group D is $-(CH_2)_t-$ 20 $CONR^{a27}R^{a28}$ wherein each symbol is as defined in claim 29, and at least one of R^{a27} and R^{a28} is C_{1-6} alkoxy, or a pharmaceutically acceptable salt thereof.
- 56. The fused ring compound of any of claims 29 to 51, wherein at least one group represented by group D is $-(CH_2)_t-C(=NR^{a33})NH_2$ wherein each symbol is as defined in claim 29, and R^{a33} is hydroxyl group or C_{1-6} alkoxy, or a pharmaceutically acceptable salt thereof.

10

- 57. The fused ring compound of any of claims 29 to 51, wherein at least one group represented by group D is $-(CH_2)_t-O-(CH_2)_p-COR^{a21}$ wherein each symbol is as defined in claim 29, and R^{a21} is amino, or a pharmaceutically acceptable salt thereof.
- 58. The fused ring compound of any of claims 29 to 51, wherein at least one group represented by group D is $-(CH_2)_t-NR^{a29}CO-R^{a24}$ wherein each symbol is as defined in claim 29, and R^{a24} is amino or C_{1-6} alkylamino, or a pharmaceutically acceptable salt thereof.
- 59. The fused ring compound of any of claims 29 to 51, wherein at least one group represented by group D is $-(CH_2)_t-NR^{a22}R^{a23}$ wherein each symbol is as defined in claim 29, and at least one of R^{a22} and R^{a23} is heterocyclic group optionally substituted by 1 to 5 substituent(s) selected from the group B, or a pharmaceutically acceptable salt thereof.
- 60. The fused ring compound of any of claims 29 to 51, wherein at least one group represented by group D is heterocyclic group having 1 to 4 heteroatom(s) selected from an oxygen atom, a nitrogen atom and a sulfur atom, or a pharmaceutically acceptable salt thereof.
- 61. The fused ring compound of claim 29 or a pharmaceutically acceptable salt thereof, which is selected from the group consisting of

ethyl 2-[4-(3-bromophenoxy)phenyl]-1-cyclohexylbenzimidazole-5-carboxylate,

- 2-[4-(3-bromophenoxy)phenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid,
- ethyl 2-[4-(2-bromo-5-chlorobenzyloxy)phenyl]-1
 cyclohexylbenzimidazole-5-carboxylate,

 ethyl 2-{4-[2-(4-chlorophenyl)-5-chlorobenzyloxy]phenyl}-1
 cyclohexylbenzimidazole-5-carboxylate,
- 2-{4-[2-(4-chlorophenyl)-5-chlorobenzyloxy]phenyl}-135 cyclohexylbenzimidazole-5-carboxylic acid,
 ethyl 2-[4-(2-bromo-5-methoxybenzyloxy)phenyl]-1cyclohexylbenzimidazole-5-carboxylate,

```
ethyl 2-\frac{4-[2-(4-\text{chlorophenyl})-5-\text{methoxybenzyloxy}]phenyl}{-1-}
         cyclohexylbenzimidazole-5-carboxylate,
          2-{4-[2-(4-chlorophenyl)-5-methoxybenzyloxy]phenyl}-1-
         cyclohexylbenzimidazole-5-carboxylic acid,
   5 ethyl 1-cyclohexyl-2-{4-[(E)-2-phenylvinyl]phenyl}benzimidazole-
         5-carboxylate,
          1-cyclohexyl-2-{4-[(E)-2-phenylvinyl]phenyl}benzimidazole-5-
        carboxylic acid,
          2-(4-benzyloxyphenyl)-1-cyclopentylbenzimidazole-5-carboxylic
 10 acid,
          2-(4-benzyloxyphenyl)-1-cyclopentylbenzimidazole-5-carboxamide,
          2-(4-benzyloxyphenyl)-5-cyano-1-cyclopentylbenzimidazole,
          2-(4-benzyloxyphenyl)-1-cyclopentylbenzimidazole-5-carboxamide
        oxime,
 ethyl 1-cyclohexyl-2-{4-[{4-(4-fluorophenyl)-2-methyl-5-
        thiazolyl methoxy] phenyl benzimidazole-5-carboxylate,
          1- \verb|cyclohexyl-2-|| 4- [| 4- (4- fluorophenyl) - 2- methyl-5- thiazolyl| - | 4- (4- fluorophenyl) - 2- methyl-5- thiazolyl| - | 4- (4- fluorophenyl) - | 4- (4- fluoroph
        methoxy]phenyl benzimidazole-5-carboxylic acid,
          ethyl 2-{4-[bis(3-fluorophenyl)methoxy]-2-fluorophenyl}-1-
 20 cyclohexylbenzimidazole-5-carboxylate,
         2-4-[bis(3-fluorophenyl)methoxy]-2-fluorophenyl}-1-
        cyclohexylbenzimidazole-5-carboxylic acid,
         ethyl 2-(4-benzoylaminophenyl)-1-cyclopentylbenzimidazole-5-
        carboxylate,
25 2-(4-benzoylaminophenyl)-1-cyclopentylbenzimidazole-5-carboxylic
       acid,
         ethyl 2-\frac{4-[3-(3-chlorophenyl)phenoxy]phenyl}{-1-}
       cyclohexylbenzimidazole-5-carboxylate,
         2-\frac{4-[3-(3-chlorophenyl)phenoxy]phenyl}{-1-}
30 cyclohexylbenzimidazole-5-carboxylic acid,
         ethyl 2-[4-(3-acetoxyphenyloxy)phenyl]-1-
       cyclohexylbenzimidazole-5-carboxylate,
         ethyl 1-cyclohexyl-2-[4-(3-hydroxyphenyloxy)phenyl]-
      benzimidazole-5-carboxylate,
35 ethyl 1-cyclohexyl-2-{4-[3-(4-pyridylmethoxy)phenyloxy]phenyl}-
      benzimidazole-5-carboxylate,
        1-cyclohexyl-2-{4-[3-(4-pyridylmethoxy)phenyloxy]phenyl}-
      benzimidazole-5-carboxylic acid,
```

```
2-(4-benzyloxyphenyl)-1-cyclopentylbenzimidazole,
   ethyl 2-(4-benzyloxyphenyl)-1-cyclopentylbenzimidazole-5-
   carboxylate,
    2-(4-benzyloxyphenyl)-1-cyclopentyl-N, N-dimethylbenzimidazole-5-
5 carboxamide,
   2-(4-benzyloxyphenyl)-1-cyclopentyl-N-methoxy-N-
   methylbenzimidazole-5-carboxamide,
    2-(4-benzyloxyphenyl)-1-cyclopentyl-5-(1-hydroxy-1-
   methylethyl) benzimidazole,
5-acetyl-2-(4-benzyloxyphenyl)-1-cyclopentylbenzimidazole,
    2-(4-benzyloxyphenyl)-1-cyclopentyl-N-(2-dimethylaminoethyl)-
   benzimidazole-5-carboxamide dihydrochloride,
    2-(4-benzyloxyphenyl)-1-cyclopentyl-5-nitrobenzimidazole,
    5-amino-2-(4-benzyloxyphenyl)-1-cyclopentylbenzimidazole
15 hydrochloride,
    5-acetylamino-2-(4-benzyloxyphenyl)-1-cyclopentylbenzimidazole,
    2-(4-benzyloxyphenyl)-1-cyclopentyl-5-methanesulfonyl-
   aminobenzimidazole,
    5-sulfamov1-2-(4-benzyloxyphenyl)-1-cyclopentylbenzimidazole,
20 2-[4-(4-tert-butylbenzyloxy)phenyl]-1-cyclopentylbenzimidazole-
   5-carboxylic acid,
    2-[4-(4-carboxybenzyloxy)phenyl]-1-cyclopentylbenzimidazole-5-
   carboxylic acid,
    2-[4-(4-chlorobenzyloxy)phenyl]-1-cyclopentylbenzimidazole-5-
25 carboxylic acid,
    2-{4-[(2-chloro-5-thienyl)methoxy]phenyl}-1-
   cyclopentylbenzimidazole-5-carboxylic acid,
    1-cyclopentyl-2-[4-(4-trifluoromethylbenzyloxy)phenyl]-
   benzimidazole-5-carboxylic acid,
30 1-cyclopentyl-2-[4-(4-methoxybenzyloxy)phenyl]benzimidazole-5-
   carboxylic acid,
    1-cyclopentyl-2-[4-(4-pyridylmethoxy)phenyl]benzimidazole-5-
   carboxylic acid hydrochloride,
    1-cyclopentyl-2-[4-(4-methylbenzyloxy)phenyl]benzimidazole-5-
35 carboxylic acid,
    1-cyclopentyl-2-{4-[(3,5-dimethyl-4-isoxazolyl)methoxy]phenyl}-
```

benzimidazole-5-carboxylic acid,

```
[2-(4-benzyloxyphenyl)-1-cyclopentylbenzimidazol-5-yl]-
   carbonylaminoacetic acid,
    2-[4-(2-chlorobenzyloxy)phenyl]-1-cyclopentylbenzimidazole-5-
   carboxylic acid,
5 2-[4-(3-chlorobenzyloxy)phenyl]-1-cyclopentylbenzimidazole-5-
   carboxylic acid,
    2-(4-benzyloxyphenyl)-3-cyclopentylbenzimidazole-5-carboxylic
   acid,
    2-[4-(benzenesulfonylamino)phenyl]-1-cyclopentylbenzimidazole-5-
10 carboxylic acid,
    1-cyclopentyl-2-[4-(3,5-dichlorophenylcarbonylamino)phenyl]-
   benzimidazole-5-carboxylic acid,
    2-{4-[(4-chlorophenyl)carbonylamino]phenyl}-1-
   cyclopentylbenzimidazole-5-carboxylic acid,
15 2-{4-[(4-tert-butylphenyl)carbonylamino]phenyl}-1-
   cyclopentylbenzimidazole-5-carboxylic acid,
    2-{4-[(4-benzyloxyphenyl)carbonylamino]phenyl}-1-
   cyclopentylbenzimidazole-5-carboxylic acid,
    trans-4-[2-(4-benzyloxyphenyl)-5-carboxybenzimidazol-1-
20 yl]cyclohexan-1-ol,
    trans-1-[2-(4-benzyloxyphenyl)-5-carboxybenzimidazol-1-yl]-4-
   methoxycyclohexane,
    2-(4-benzyloxyphenyl)-5-carboxymethyl-1-cyclopentylbenzimidazole,
    2-[(4-cyclohexylphenyl)carbonylamino]-1-
25 cyclopentylbenzimidazole-5-carboxylic acid,
    1-cyclopentyl-2-[4-(3,5-dichlorobenzyloxy)phenyl]benzimidazole-
   5-carboxylic acid,
    1-cyclopentyl-2-[4-(3,4-dichlorobenzyloxy)phenyl]benzimidazole-
   5-carboxylic acid,
30 1-cyclopentyl-2-[4-(phenylcarbamoylamino)phenyl]benzimidazole-5-
   carboxylic acid,
    1-cyclopentyl-2-[4-(diphenylmethoxy)phenyl]benzimidazole-5-
   carboxylic acid,
    1-cyclopentyl-2-(4-phenethyloxyphenyl)benzimidazole-5-carboxylic
35 acid,
    trans-1-[2-(4-benzyloxyphenyl)-5-carboxybenzimidazol-1-yl]-4-
   tert-butylcyclohexane,
```

```
2-(4-benzyloxyphenyl)-5-carboxymethoxy-1-
   cyclopentylbenzimidazole,
    2-(4-benzylaminophenyl)-1-cyclopentylbenzimidazole-5-carboxylic
   acid,
5 2-[4-(N-benzenesulfonyl-N-methylamino)phenyl]-1-
   cyclopentylbenzimidazole-5-carboxylic acid,
    2-[4-(N-benzyl-N-methylamino)phenyl]-1-cyclopentylbenzimidazole-
   5-carboxylic acid,
    1-cyclohexyl-2-(4-phenethylphenyl)benzimidazole-5-carboxylic
10 acid,
    1-cyclohexyl-2-[4-(3,5-dichlorobenzyloxy)phenyl]benzimidazole-5-
   carboxylic acid,
    1-cyclohexyl-2-[4-(diphenylmethoxy)phenyl]benzimidazole-5-
   carboxylic acid,
15 1-cyclohexyl-2-[4-(3,5-di-tert-butylbenzyloxy)phenyl]-
   benzimidazole-5-carboxylic acid,
    2-(4-benzyloxyphenyl)-1-(4-methylcyclohexyl)benzimidazole-5-
   carboxylic acid,
    1-cyclohexyl-2-{4-[2-(2-naphthyl) ethoxy]phenyl}benzimidazole-5-
20 carboxylic acid,
    1-cyclohexyl-2-[4-(1-naphthyl)methoxyphenyl]benzimidazole-5-
   carboxylic acid,
    1-cyclohexyl-2-[4-(dibenzylamino)phenyl]benzimidazole-5-
   carboxylic acid,
25 2-[4-(2-biphenylylmethoxy)phenyl]-1-cyclohexylbenzimidazole-5-
   carboxylic acid,
    2-(4-benzyloxyphenyl)-1-cyclohexylbenzimidazole-5-carboxylic
   acid,
    1-cyclohexyl-2-[4-(dibenzylmethoxy)phenyl]benzimidazole-5-
30 carboxylic acid,
```

- 2-(4-benzoylmethoxyphenyl)-1-cyclohexylbenzimidazole-5carboxylic acid,
- 1-cyclohexyl-2-[4-(3,3-diphenylpropyloxy)phenyl]benzimidazole-5carboxylic acid,
- 35 2-[4-(3-chloro-6-phenylbenzyloxy)phenyl]-1cyclohexylbenzimidazole-5-carboxylic acid, 1-cyclohexy1-2-{4-[2-(phenoxy)ethoxy]phenyl}benzimidazole-5carboxylic acid,

- 1-cyclohexyl-2-[4-(3-phenylpropyloxy)phenyl]benzimidazole-5-carboxylic acid,
- 1-cyclohexyl-2-[4-(5-phenylpentyloxy)phenyl]benzimidazole-5-carboxylic acid,
- 5 2-(2-benzyloxy-5-pyridyl)-1-cyclohexylbenzimidazole-5-carboxylic acid,
 - 1-cyclohexyl-2-{4-[2-(3,4,5-trimethoxyphenyl)ethoxy]phenyl}-benzimidazole-5-carboxylic acid,
- 2-(4-benzyloxyphenyl)-1-(4,4-dimethylcyclohexyl)benzimidazole-510 carboxylic acid,
 - 1-cyclohexyl-2-{4-[2-(1-naphthyl)ethoxy]phenyl}benzimidazole-5-carboxylic acid,
 - 2-[4-(2-benzyloxyphenoxy)phenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid,
- 2-[4-(3-benzyloxyphenoxy)phenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid,
 - 1-cyclohexyl-2-[4-(2-hydroxyphenoxy)phenyl]benzimidazole-5-carboxylic acid,
- 1-cyclohexyl-2-[4-(3-hydroxyphenoxy)phenyl]benzimidazole-5-20 carboxylic acid,
 - 1-cyclohexyl-2-[4-(2-methoxyphenoxy)phenyl]benzimidazole-5-carboxylic acid,
 - 1-cyclohexyl-2-[4-(3-methoxyphenoxy)phenyl]benzimidazole-5-carboxylic acid,
- 1-cyclohexyl-2-[4-(2-propoxyphenoxy)phenyl]benzimidazole-5-carboxylic acid,
 - 1-cyclohexyl-2-[4-(3-propoxyphenoxy)phenyl]benzimidazole-5-carboxylic acid,
- 1-cyclohexyl-2-{4-[2-(3-methyl-2-butenyloxy)phenoxy]phenyl}30 benzimidazole-5-carboxylic acid,
 - 1-cyclohexyl-2-{4-[3-(3-methyl-2-butenyloxy)phenoxy]phenyl}-benzimidazole-5-carboxylic acid,
 - 1-cyclohexyl-2-[4-(2-isopentyloxyphenoxy)phenyl]benzimidazole-5-carboxylic acid,
- 35 1-cyclohexyl-2-[4-(3-isopentyloxyphenoxy)phenyl]benzimidazole-5-carboxylic acid,
 - 1-cyclohexyl-2-{4-[2-(10,11-dihydro-5H-dibenzo[b,f]azepin-5-yl)ethoxy]phenyl}benzimidazole-5-carboxylic acid,

```
1-cyclohexyl-2-{4-[2-(4-trifluoromethylphenyl)benzyloxy]-
   phenyl benzimidazole-5-carboxylic acid,
    2-\{4-[bis(4-chlorophenyl)methoxy]phenyl\}-1-
   cyclohexylbenzimidazole-5-carboxylic acid,
5 1-cyclohexyl-2-{4-[2-(4-methoxyphenyl)ethoxy]phenyl}-
   benzimidazole-5-carboxylic acid,
    1-cyclohexyl-2-{4-[2-(2-methoxyphenyl)ethoxy]phenyl}-
   benzimidazole-5-carboxylic acid,
    1-\text{cyclohexyl}-2-\frac{4}{2} (3-methoxyphenyl) ethoxy]phenyl
10 benzimidazole-5-carboxylic acid,
    2-(4-benzyloxyphenyl)-1-cycloheptylbenzimidazole-5-carboxylic
    1-cyclohexyl-2-[4-(2-phenethyloxyphenoxy)phenyl]benzimidazole-5-
   carboxylic acid,
15 1-cyclohexyl-2-[4-(3-phenethyloxyphenoxy)phenyl]benzimidazole-5-
   carboxylic acid,
    1-cyclohexyl-2-[4-(2,2-diphenylethoxy)phenyl]benzimidazole-5-
   carboxylic acid,
    cis-1-[2-(4-benzyloxyphenyl)-5-carboxybenzimidazol-1-yl]-4-
20 fluorocyclohexane,
    1-cyclohexyl-2-[4-(2-phenoxyphenoxy)phenyl]benzimidazole-5-
   carboxylic acid,
    1-cyclohexyl-2-[4-(3-phenoxyphenoxy)phenyl]benzimidazole-5-
   carboxylic acid,
25 2-{4-[(2R)-2-benzyloxycarbonylamino-2-phenylethoxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid,
    1-cyclohexyl-2-{2-fluoro-4-[2-(4-trifluoromethylphenyl)-
   benzyloxy]phenyl benzimidazole-5-carboxylic acid,
    2-[4-(4-benzyloxyphenoxy)phenyl]-1-cyclohexylbenzimidazole-5-
30 carboxylic acid,
    2-{4-[bis(4-methylphenyl)methoxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid,
    2-{4-[bis(4-fluorophenyl)methoxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid,
35 1-cyclohexyl-6-methoxy-2-[4-(3-phenylpropoxy)phenyl]-
   benzimidazole-5-carboxylic acid,
    1-cyclohexyl-6-hydroxy-2-[4-(3-phenylpropoxy)phenyl]-
   benzimidazole-5-carboxylic acid,
```

```
1-cyclohexyl-6-methyl-2-[4-(3-phenylpropoxy)phenyl]-
        benzimidazole-5-carboxylic acid,
          2-\{4-[2-(2-benzyloxyphenyl) ethoxy]phenyl\}-1-
        cyclohexylbenzimidazole-5-carboxylic acid,
   5 2-\frac{4-[2-(3-benzyloxyphenyl)]}{-1-}
        cyclohexylbenzimidazole-5-carboxylic acid,
          2-[4-(2-carboxymethyloxyphenoxy)phenyl]-1-
        cyclohexylbenzimidazole-5-carboxylic acid,
          2-[4-(3-carboxymethyloxyphenoxy)phenyl]-1-
 10 cyclohexylbenzimidazole-5-carboxylic acid,
         2-4-[3-chloro-6-(4-methylphenyl)benzyloxy]phenyl}-1-
        cyclohexylbenzimidazole-5-carboxylic acid,
         2-4-[3-chloro-6-(4-methoxyphenyl)benzyloxy]phenyl}-1-
        cyclohexylbenzimidazole-5-carboxylic acid,
 15 1-cyclohexyl-2-{2-methyl-4-[2-(4-trifluoromethylphenyl)-
       benzyloxy]phenyl benzimidazole-5-carboxylic acid,
         2-{4-[2-(4-tert-butylphenyl)-5-chlorobenzyloxy]phenyl}-1-
       cyclohexylbenzimidazole-5-carboxylic acid,
         2-{4-(3-chloro-6-phenylbenzyloxy)-2-fluorophenyl}-1-
20 cyclohexylbenzimidazole-5-carboxylic acid,
         2-\{4-[3-chloro-6-(3,5-dichlorophenyl)benzyloxy]phenyl\}-1-
       cyclohexylbenzimidazole-5-carboxylic acid,
         2-{4-[bis(4-fluorophenyl)methoxy]-2-fluorophenyl}-1-
       cyclohexylbenzimidazole-5-carboxylic acid,
25 2-\frac{4-(4-benzyloxyphenoxy)-2-chlorophenyl}{-1-}
       cyclohexylbenzimidazole-5-carboxylic acid,
        2-{4-(4-benzyloxyphenoxy)-2-trifluoromethylphenyl}-1-
       cyclohexylbenzimidazole-5-carboxylic acid,
        2-\frac{4-[3-chloro-6-(2-trifluoromethylphenyl)benzyloxy]phenyl}{-1-}
30 cyclohexylbenzimidazole-5-carboxylic acid,
        2-\frac{4-[(2R)-2-amino-2-phenylethoxy]phenyl}{-1-}
       cyclohexylbenzimidazole-5-carboxylic acid,
        2-[4-(2-biphenylyloxy)phenyl]-1-cyclohexylbenzimidazole-5-
       carboxylic acid,
35 2-[4-(3-biphenylyloxy)phenyl]-1-cyclohexylbenzimidazole-5-
      carboxylic acid,
        2-4-[2-4(1-tert-butoxycarbonyl-4-piperidyl)methoxy{phenoxy}-1-[2-4(1-tert-butoxycarbonyl-4-piperidyl)methoxy{phenoxy}]-1-[2-4(1-tert-butoxycarbonyl-4-piperidyl)methoxy{phenoxy}]-1-[2-4(1-tert-butoxycarbonyl-4-piperidyl)methoxy{phenoxy}]-1-[2-4(1-tert-butoxycarbonyl-4-piperidyl)methoxy{phenoxy}]-1-[2-4(1-tert-butoxycarbonyl-4-piperidyl)methoxy{phenoxy}]-1-[2-4(1-tert-butoxycarbonyl-4-piperidyl)methoxy{phenoxy}]-1-[2-4(1-tert-butoxycarbonyl-4-piperidyl)methoxy{phenoxy}]-1-[2-4(1-tert-butoxycarbonyl-4-piperidyl)methoxy{phenoxy}]-1-[2-4(1-tert-butoxycarbonyl-4-piperidyl)methoxy{phenoxy}]-1-[2-4(1-tert-butoxycarbonyl-4-piperidyl)methoxy{phenoxy}]-1-[2-4(1-tert-butoxycarbonyl-4-piperidyl)methoxy{phenoxy}]-1-[2-4(1-tert-butoxycarbonyl-4-piperidyl)methoxy{phenoxy}]-1-[2-4(1-tert-butoxycarbonyl-4-piperidyl)methoxy{phenoxy}]-1-[2-4(1-tert-butoxycarbonyl-4-piperidyl)methoxy{phenoxy}]-1-[2-4(1-tert-butoxycarbonyl-4-piperidyl)methoxy{phenoxy}]-1-[2-4(1-tert-butoxycarbonyl-4-piperidyl)methoxy{phenoxy}]-1-[2-4(1-tert-butoxycarbonyl-4-piperidyl)methoxy(bytoxycarbonyl-4-piperidyl)methoxy(bytoxycarbonyl-4-piperidyl)methoxy(bytoxycarbonyl-4-piperidyl)methoxy(bytoxycarbonyl-4-piperidyl)methoxy(bytoxycarbonyl-4-piperidyl)methoxy(bytoxycarbonyl-4-piperidyl)methoxy(bytoxycarbonyl-4-piperidyl)methoxy(bytoxycarbonyl-4-piperidyl)methoxy(bytoxycarbonyl-4-piperidyl)methoxy(bytoxycarbonyl-4-piperidyl)methoxy(bytoxycarbonyl-4-piperidyl)methoxy(bytoxycarbonyl-4-piperidyl)methoxy(bytoxycarbonyl-4-piperidyl)methoxy(bytoxycarbonyl-4-piperidyl)methoxy(bytoxycarbonyl-4-piperidyl)methoxy(bytoxycarbonyl-4-piperidyl)methoxy(bytoxycarbonyl-4-piperidyl)methoxy(bytoxycarbonyl-4-piperidyl)methoxy(bytoxycarbonyl-4-piperidyl)methoxy(bytoxycarbonyl-4-piperidyl)methoxy(bytoxycarbonyl-4-piperidyl)methoxy(bytoxycarbonyl-4-piperidyl)methoxy(bytoxycarbonyl-4-piperidyl)methoxy(bytoxycarbonyl-4-piperidyl)methoxy(bytoxycarbonyl-4-piperidyl)methoxy(bytoxycarbonyl-4-piperidyl)methoxy(bytoxycarbonyl-4-piperidyl)methoxy(bytoxycarbonyl-4-piperidyl)methoxy(bytoxycarbo
      phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid,
```

```
2-{4-[3-{(1-tert-butoxycarbonyl-4-piperidyl)methoxy{phenoxy}-
   phenyl \-1-cyclohexylbenzimidazole-5-carboxylic acid,
    2-\{4-[3-chloro-6-(3,4,5-trimethoxyphenyl)benzyloxy]phenyl\}-1-
   cyclohexylbenzimidazole-5-carboxylic acid,
5 2-{4-[2-(2-biphenylyl)ethoxy]phenyl}-1-cyclohexylbenzimidazole-5-
   carboxylic acid,
   2-[4-(2-biphenylylmethoxy)phenyl]-1-cyclohexylbenzimidazole-5-
   carboxylic acid,
    1-cyclohexyl-2-{4-[2-(4-piperidylmethoxy)phenoxy]phenyl}-
10 benzimidazole-5-carboxylic acid hydrochloride,
    1-cyclohexyl-2-{4-[3-(4-piperidylmethoxy)phenoxy]phenyl}-
   benzimidazole-5-carboxylic acid hydrochloride,
    2-\{4-[(2R)-2-acetylamino-2-phenylethoxy]phenyl\}-1-
   cyclohexylbenzimidazole-5-carboxylic acid,
15 1-\text{cyclohexyl}-2-\{4-[3-(4-\text{methyl}-3-\text{pentenyloxy}) \text{ phenoxy}] \text{ phenyl}\}-
   benzimidazole-5-carboxylic acid,
    1-cyclohexyl-2-{4-[3-(3-methyl-3-butenyloxy)phenoxy]phenyl}-
   benzimidazole-5-carboxylic acid,
    2-{4-[{(2S)-1-benzyl-2-pyrrolidinyl}methoxy]phenyl}-1-cyclohexyl-
20 benzimidazole-5-carboxylic acid hydrochloride,
    2-{4-[3-chloro-6-(4-methylthiophenyl)benzyloxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid,
    2-\{4-[3-chloro-6-(4-methanesulfonylphenyl)benzyloxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid,
25 2-\{4-[3-chloro-6-(2-thienyl)benzyloxy]phenyl\}-1-
   cyclohexylbenzimidazole-5-carboxylic acid,
    2-\{4-[3-chloro-6-(3-chlorophenyl)benzyloxy]phenyl\}-1-
   cyclohexylbenzimidazole-5-carboxylic acid,
    2-\{4-[3-chloro-6-(3-pyridyl)benzyloxy]phenyl\}-1-
30 cyclohexylbenzimidazole-5-carboxylic acid,
    2-{4-[3-chloro-6-(4-fluorophenyl)benzyloxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid,
    2-[4-(4-benzyloxyphenoxy)-3-fluorophenyl]-1-
   cyclohexylbenzimidazole-5-carboxylic acid,
35 2-[4-(2-bromo-5-chlorobenzyloxy)phenyl]-1-
   cyclohexylbenzimidazole-5-carboxylic acid,
    2-{4-[3-chloro-6-(4-chlorophenyl)benzyloxy]-2-fluorophenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid,
```

```
2-{4-[2-{(1-acetyl-4-piperidyl)methoxy}phenoxy]phenyl}-1-
    cyclohexylbenzimidazole-5-carboxylic acid,
    2-\frac{4-[3-(1-acetyl-4-piperidyl) methoxy}{phenoxy}phenoxy]phenyl}-1-
    cyclohexylbenzimidazole-5-carboxylic acid,
 5 1-cyclohexyl-2-{4-[3-(2-propynyloxy)phenoxy]phenyl}benzimidazole-
    5-carboxylic acid,
    1-cyclohexyl-2-{4-[3-(3-pyridylmethoxy)phenoxy]phenyl}-
   benzimidazole-5-carboxylic acid,
    2-(4-benzyloxy-2-methoxyphenyl)-1-cyclohexylbenzimidazole-5-
10 carboxylic acid,
    2-[4-(2-bromo-5-methoxybenzyloxy)phenyl]-1-
   cyclohexylbenzimidazole-5-carboxylic acid,
    2-[4-(carboxydiphenylmethoxy)phenyl]-1-cyclohexylbenzimidazole-
   5-carboxylic acid,
2-\frac{4-[2-(4-\text{chlorophenyl})-5-\text{nitrobenzyloxy}]\text{phenyl}}{-1-}
   cyclohexylbenzimidazole-5-carboxylic acid,
    2-4-[3-acetylamino-6-(4-chlorophenyl)benzyloxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid,
    2-\{4-[2-(4-carboxyphenyl)-5-chlorobenzyloxy]phenyl\}-1-
20 cyclohexylbenzimidazole-5-carboxylic acid,
    2-{4-[{(28)-1-benzyloxycarbonyl-2-pyrrolidinyl}methoxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid,
    2-{2-chloro-4-[2-(4-trifluoromethylphenyl)benzyloxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid,
25 1-cyclohexyl-2-{4-[3-(2-pyridylmethoxy)phenoxy]phenyl}-
   benzimidazole-5-carboxylic acid,
    2-4-[2-(4-chlorophenyl)-5-fluorobenzyloxy]phenyl\-1-
   cyclohexylbenzimidazole-5-carboxylic acid,
    2-\frac{4-[3-carboxy-6-(4-chlorophenyl)benzyloxy]phenyl}{-1-}
30 cyclohexylbenzimidazole-5-carboxylic acid,
    2-4-[3-carbamoyl-6-(4-chlorophenyl)benzyloxy]phenyl\-1-
   cyclohexylbenzimidazole-5-carboxylic acid,
    1-cyclohexyl-2-{4-[2-(dimethylcarbamoylmethoxy)phenoxy]-
   phenyl benzimidazole-5-carboxylic acid,
35 1-cyclohexyl-2-{4-[2-(piperidinocarbonylmethoxy)phenoxy]-
   phenyl/benzimidazole-5-carboxylic acid,
    2-\frac{4-[(2S)-1-benzenesulfonyl-2-pyrrolidinyl)methoxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid,
```

```
2-\frac{4-[(2S)-1-benzoyl-2-pyrrolidinyl)}{methoxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid,
    2-\{4-[2-(4-carbamoylphenyl)-5-chlorobenzyloxy]phenyl\}-1-
   cyclohexylbenzimidazole-5-carboxylic acid,
5 1-cyclohexyl-2-{4-[3-(dimethylcarbamoylmethoxy)phenoxy]-
   phenyl benzimidazole-5-carboxylic acid,
    1-cyclohexyl-2-{4-[3-(piperidinocarbonylmethoxy)phenoxy]-
   phenyl benzimidazole-5-carboxylic acid,
    1-cyclohexyl-2-{4-[3-{(1-methanesulfonyl-4-piperidyl)methoxy}-
10 phenoxy]phenyl benzimidazole-5-carboxylic acid,
    1-cyclohexyl-2-{4-[{2-methyl-5-(4-chlorophenyl)-4-oxazolyl}-
   methoxy]phenyl benzimidazole-5-carboxylic acid,
    2-\{4-[3-(3-chlorobenzyloxy)phenoxy]phenyl\}-1-
   cyclohexylbenzimidazole-5-carboxylic acid,
  2-\{4-[3-(4-chlorobenzyloxy) phenoxy] phenyl\}-1-
   cyclohexylbenzimidazole-5-carboxylic acid,
    1-cyclohexyl-2-{4-[3-(4-fluorobenzyloxy)phenoxy]phenyl}-
   benzimidazole-5-carboxylic acid,
    1-\text{cyclohexyl}-2-\{4-[\{(2S)-1-(4-\text{nitrophenyl})-2-\text{pyrrolidinyl}\}-
20 methoxy]phenyl benzimidazole-5-carboxylic acid,
    1-cyclohexyl-2-{4-[{(2S)-1-phenyl-2-pyrrolidinyl}methoxy]-
   phenyl benzimidazole-5-carboxylic acid hydrochloride,
    2-{4-[{(2S)-1-(4-acetylaminophenyl)-2-pyrrolidinyl}methoxy]-
   phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid,
25 2-{4-[{5-(4-chlorophenyl)-2-methyl-4-thiazolyl}methoxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid,
    2-{4-[bis(3-fluorophenyl)methoxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid,
    1-cyclohexyl-2-{4-[2-(4-chlorophenyl)-3-nitrobenzyloxy]phenyl}-
30 benzimidazole-5-carboxylic acid,
    1-cyclohexyl-2-{4-[3-(4-tetrahydropyranyloxy)phenoxy]phenyl}-
   benzimidazole-5-carboxylic acid,
    1-cyclohexyl-2-{4-[3-(4-trifluoromethylbenzyloxy)phenoxy]phenyl}-
   benzimidazole-5-carboxylic acid,
    1-cyclohexyl-2-{4-[3-{(1-methyl-4-piperidyl)methoxy/phenoxy]-
   phenyl benzimidazole-5-carboxylic acid,
    2-\{4-[3-(4-tert-butylbenzyloxy) phenoxy]phenyl\}-1-
   cyclohexylbenzimidazole-5-carboxylic acid,
```

```
2-\{4-[3-(2-\text{chlorobenzyloxy}) \text{ phenoxy}] \text{ phenyl}\}-1-
              cyclohexylbenzimidazole-5-carboxylic acid,
                  1-cyclohexyl-2-{4-[3-(3-pyridyl)phenoxy]phenylbenzimidazole-5-
              carboxylic acid,
   5 2-\{4-[3-(4-chlorophenyl)phenoxy]phenyl\}-1-
              cyclohexylbenzimidazole-5-carboxylic acid,
                  1-cyclohexyl-2-{4-[3-(4-methoxyphenyl)phenoxy]phenyl}-
              benzimidazole-5-carboxylic acid,
                  1-\text{cyclohexyl}-2-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{
10 thiazolyl methoxy] phenyl benzimidazole-5-carboxylic acid,
                  2-\{4-[\{4-(4-chlorophenyl)-2-methyl-5-thiazolyl\}methoxy]phenyl\}-1-
              cyclohexylbenzimidazole-5-carboxylic acid,
                  2-{4-[1-(4-chlorobenzyl)-3-piperidyloxy]phenyl}-1-
              cyclohexylbenzimidazole-5-carboxylic acid,
15 1-cyclohexyl-2-{4-[3-{(2-methyl-4-thiazolyl)methoxy}phenoxy]-
             phenyl benzimidazole-5-carboxylic acid,
                  1-cyclohexyl-2-{4-[3-{(2,4-dimethyl-5-thiazolyl)methoxy}phenoxy]-
              phenyl benzimidazole-5-carboxylic acid,
                  1-cyclohexyl-2-{4-[3-(3,5-dichlorophenyl)phenoxy]phenyl}-
20 benzimidazole-5-carboxylic acid,
                 2-{4-[1-(4-chlorobenzyl)-4-piperidyloxy]phenyl}-1-
              cyclohexylbenzimidazole-5-carboxylic acid,
                  2-{4-[3-(4-chlorobenzyloxy)piperidino]phenyl}-1-
              cyclohexylbenzimidazole-5-carboxylic acid,
25 2-{4-[4-carbamoyl-2-(4-chlorophenyl)benzyloxy]phenyl}-1-
              cyclohexylbenzimidazole-5-carboxylic acid,
                  2-{4-[4-(4-chlorobenzyloxy)piperidino]phenyl}-1-
              cyclohexylbenzimidazole-5-carboxylic acid,
                  2-{4-[3-{(2-chloro-4-pyridyl)methoxy{phenoxy]phenyl}-1-
 30 cyclohexylbenzimidazole-5-carboxylic acid,
                  2-\frac{4-[(2S)-1-(4-dimethylcarbamoylphenyl)-2-pyrrolidinyl}{-}
              methoxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid,
                  2-\{4-[2-(4-chlorophenyl)-5-ethoxycarbonylbenzyloxy]phenyl\}-1-
              cyclohexylbenzimidazole-5-carboxylic acid,
 35 1-cyclohexyl-2-[4-(3-trifluoromethylphenoxy)phenyl]-
              benzimidazole-5-carboxylic acid,
                  1-\text{cyclohexyl}-2-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{
              thiazolyl methoxy] phenyl benzimidazole-5-carboxylic acid,
```

```
2-\frac{4-[2-(4-\text{chlorophenyl})-5-\text{dimethylcarbamoylbenzyloxy}] \text{phenyl}}{-1-}
   cyclohexylbenzimidazole-5-carboxylic acid,
    2-\{4-[\{4-(4-chlorophenyl)-2-methyl-5-pyrimidinyl\}methoxy]phenyl\}-
   1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
5 2-{4-[{2-(4-chlorophenyl)-3-pyridyl}methoxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid dihydrochloride,
    2-\{4-[\{3-(4-\text{chlorophenyl})-2-\text{pyridyl}\}\text{methoxy}]\text{phenyl}\}-1-
   cyclohexylbenzimidazole-5-carboxylic acid,
    2-{4-[2-(3-chlorophenyl)-4-methylamino-1,3,5-triazin-6-
10 yloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
   trifluoroacetate,
    2-\frac{4-[2-(4-chlorophenyl)-4-(5-tetrazolyl)benzyloxy]phenyl}{-1-}
   cyclohexylbenzimidazole-5-carboxylic acid,
    2-[4-(4-benzyloxy-6-pyrimidinyloxy)phenyl]-1-
15 cyclohexylbenzimidazole-5-carboxylic acid,
    1-cyclohexyl-2-\{4-[4-(4-pyridylmethoxy)-6-pyrimidinyloxy]phenyl\}-
   benzimidazole-5-carboxylic acid,
    2-\{4-[4-(3-chlorophenyl)-6-pyrimidinyloxy]phenyl\}-1-
   cyclohexylbenzimidazole-5-carboxylic acid,
methyl 2-\{4-[2-(4-\text{chlorophenyl})-5-\text{methoxybenzyloxy}] \text{ phenyl}\}-1-
   cyclohexylbenzimidazole-5-carboxylate,
    2-{4-[2-(4-chlorophenyl)-5-methoxybenzyloxy]phenyl}-1-cyclohexyl-
   benzimidazole-5-carboxylic acid hydrochloride,
    ethyl 2-{4-[3-(4-chlorophenyl)pyridin-2-ylmethoxy]phenyl}-1-
25 cyclohexylbenzimidazole-5-carboxylate,
    methyl 2-[4-(2-bromo-5-tert-butoxycarbonylbenzyloxy)phenyl]-1-
   cyclohexylbenzimidazole-5-carboxylate,
    methyl 2-{4-[5-tert-butoxycarbonyl-2-(4-chlorophenyl)benzyloxy]-
   phenyl \-1-cyclohexylbenzimidazole-5-carboxylate,
methyl 2-{4-[5-carboxy-2-(4-chlorophenyl)benzyloxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylate hydrochloride,
    methyl 2-{4-[2-(4-chlorophenyl)-5-methylcarbamoylbenzyloxy]-
   phenyl \-1-cyclohexylbenzimidazole-5-carboxylate,
    2-{4-[2-(4-chlorophenyl)-5-methylcarbamoylbenzyloxy]phenyl}-1-
35 cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
    2-{4-[3-(tert-butylsulfamoyl)-6-(4-chlorophenyl)benzyloxy]-
   phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid,
```

```
2-\frac{4-[2-(4-\text{chlorophenyl})-5-\text{sulfamoylbenzyloxy}]\text{phenyl}}{-1-}
        cyclohexylbenzimidazole-5-carboxylic acid trifluoroacetate,
           2-(4-benzyloxycyclohexyl)-1-cyclohexylbenzimidazole-5-carboxylic
        acid hydrochloride,
  5 2-[2-(2-biphenylyloxymethyl)-5-thienyl]-1-
        cyclohexylbenzimidazole-5-carboxylic acid,
           2-[2-(2-biphenylyloxymethyl)-5-furyl]-1-cyclohexylbenzimidazole-
         5-carboxylic acid,
           1-\text{cyclohexyl}-2-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{
thiazolyl methoxy phenyl benzimidazole-5-carboxylic acid,
           1-cyclohexyl-2-{4-[{4-(4-carboxyphenyl)-2-methyl-5-thiazolyl}-
        methoxy]phenyl/benzimidazole-5-carboxylic acid hydrochloride,
           1-cyclohexyl-2-\frac{1}{2}-fluoro-4-\frac{4}{1}-fluoro-2-\frac{3}{1}-fluorobenzoyl)-
        benzyloxy]phenyl benzimidazole-5-carboxylic acid,
       2-\{4-[2-(4-chlorophenyl)-5-methoxybenzyloxy]phenyl\}-1-
        cyclohexylbenzimidazole-5-sulfonic acid,
          2-\frac{4-[2-(4-\text{chlorophenyl})-5-\text{methoxybenzyloxy}]}{2-3-}
        cyclohexylbenzimidazole-4-carboxylic acid,
          1-cyclohexyl-2-{4-[3-dimethylcarbamoyl-5-(4-pyridylmethoxy)-
20 phenoxy]phenyl benzimidazole-5-carboxylic acid dihydrochloride,
          1-cvclohexvl-2-{4-[3-carboxy-5-(4-pyridylmethoxy)phenoxy]-
        phenyl benzimidazole-5-carboxylic acid dihydrochloride,
          2-\{4-[2-(4-chlorophenyl)-5-methoxybenzyloxy]phenyl\}-1-
        cyclohexylbenzimidazole-4-carboxylic acid,
25 2-{4-[3-carbamoyl-6-(4-chlorophenyl)benzyloxy]phenyl}-1-
        cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
          2-\frac{4-[4-(4-carboxyphenyl)-3-pyridyl}{methoxy}phenyl}-1-
        cyclohexylbenzimidazole-5-carboxylic acid,
          2-\frac{4-[2-(4-chlorophenyl)-5-methoxybenzyloxy]phenyl}{-1-(4-
30 tetrahydrothiopyranyl)benzimidazole-5-carboxylic acid,
          2-{4-[2-(4-chlorophenyl)-5-dimethylcarbamoylbenzyloxy]phenyl}-1-
        cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
          1-cyclohexyl-2-{4-[3-dimethylcarbamoyl-6-(4-
        trifluoromethylphenyl)benzyloxy]phenyl}benzimidazole-5-carboxylic
35 acid hydrochloride,
          1-cyclohexyl-2-{4-[3-dimethylcarbamoyl-6-(4-methylthiophenyl)-
        benzyloxy]phenyl benzimidazole-5-carboxylic acid hydrochloride,
```

```
2-\frac{4-[2-(4-chlorophenyl)-5-methylcarbamoylbenzyloxy]-2-
         fluorophenyl \{-1-cyclohexylbenzimidazole-5-carboxylic acid
        hydrochloride,
          2-14-[2-(4-chlorophenyl)-5-dimethylcarbamoylbenzyloxy]-2-
  5 fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
        hydrochloride,
          2-{4-[3-carbamoy1-6-(4-chlorophenyl)benzyloxy]-2-fluorophenyl}-1-
        cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
          2-{4-[3-dimethylcarbamoyl-6-(4-methanesulfonylphenyl)benzyloxy]-
10 phenyl \-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
          2-\frac{4-3-\text{dimethylcarbamovl}-6-(3-\text{pyridyl})\text{benzyloxy}\text{phenyl}}{-1-}
        cyclohexylbenzimidazole-5-carboxylic acid dihydrochloride,
          2-{4-[3-dimethylcarbamoyl-6-(4-dimethylcarbamoylphenyl)-
        benzyloxy]phenyl\-1-cyclohexylbenzimidazole-5-carboxylic acid,
          2-\frac{4-[2-(4-\text{chlorophenyl})-5-\text{methoxybenzyloxy}]-2-\text{fluorophenyl}}{-1-}
         (4-tetrahydrothiopyranyl)benzimidazole-5-carboxylic acid,
          2-\frac{4-[2-(4-chlorophenyl)-5-dimethylsulfamoylbenzyloxy]phenyl}{-1-}
        cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
          2-\frac{4-[2-(4-chlorophenyl)-5-methanesulfonylbenzyloxy]phenyl}{-1-}
20 cyclohexylbenzimidazole-5-carboxylic acid,
          2-{4-[2-(4-chlorophenyl)-5-methylsulfamoylbenzyloxy]phenyl}-1-
        cyclohexylbenzimidazole-5-carboxylic acid,
        2-{4-[2-(4-chlorophenyl)-5-dimethylaminobenzyloxy]phenyl}-1-
        cyclohexylbenzimidazole-5-carboxylic acid,
25 2-\frac{1}{4}-\frac{2-(4-\text{chlorophenyl})-5-\text{methanesulfonylaminobenzyloxy}}{25}
        1-cyclohexylbenzimidazole-5-carboxylic acid,
          2-{4-[2-(4-chlorophenyl)-5-diethylcarbamoylbenzyloxy]-2-
        fluorophenyl \}-1-cyclohexylbenzimidazole-5-carboxylic acid,
          2-\frac{4-[2-(4-chlorophenyl)-5-isopropylcarbamoylbenzyloxy]-2-
30 fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid,
          2-\frac{1}{4} [2-(4-chlorophenyl)-5-piperidinocarbonylbenzyloxy]-2-
        fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid,
          2-{4-[2-(4-chlorophenyl)-5-(1-pyrrolidinyl)carbonylbenzyloxy]-2-
        fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid,
      2-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{
        fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid,
```

```
2-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{
         carbonylbenzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-
         carboxylic acid,
           2-{4-[2-(4-chlorophenyl)-5-morpholinocarbonylbenzyloxy]-2-
  5 fluorophenyl \rangle -1-cyclohexylbenzimidazole-5-carboxylic acid,
           2-\frac{1}{4}-[2-(4-\text{chlorophenyl})-5-\text{thiomorpholinocarbonylbenzyloxy}]-2-
         fluorophenyl \-1-cyclohexylbenzimidazole-5-carboxylic acid,
           2-\frac{4-[3-(carboxymethylcarbamoyl)-6-(4-chlorophenyl)benzyloxy]-2-
         fluorophenyl \-1-cyclohexylbenzimidazole-5-carboxylic acid,
10 2-\frac{4-[2-4-(2-carboxyethyl)]}{-1-chlorobenzyloxy]} phenyl-1-
        cyclohexylbenzimidazole-5-carboxylic acid,
           2-{4-[3-chloro-6-(4-hydroxymethylphenyl)benzyloxy]phenyl}-1-
         cyclohexylbenzimidazole-5-carboxylic acid,
           2-{4-[3-chloro-6-(4-methoxymethylphenyl)benzyloxy]phenyl}-1-
15 cyclohexylbenzimidazole-5-carboxylic acid,
           2-\{4-[2-(3-carboxyphenyl)-5-chlorobenzyloxy]phenyl\}-1-
         cyclohexylbenzimidazole-5-carboxylic acid,
           2-\{4-[2-(4-chlorophenyl)-5-methylthiobenzyloxy]phenyl\}-1-
        cyclohexylbenzimidazole-5-carboxylic acid,
20 2-\frac{4-[2-(4-chlorophenyl)-5-methylsulfinylbenzyloxy]phenyl}-1-
        cyclohexylbenzimidazole-5-carboxylic acid,
           2-\frac{1}{4}-[2-(4-\text{chlorophenyl})-5-\text{cyanobenzyloxy}] phenyl\frac{1}{2}-1-\text{cyclohexyl}
        benzimidazole-5-carboxylic acid,
           2-{4-[bis(2-pyridyl)methoxy]phenyl}-1-cyclohexylbenzimidazole-5-
25 carboxylic acid,
           2-{4-[bis(4-dimethylcarbamoylphenyl)methoxy]phenyl}-1-
        cyclohexylbenzimidazole-5-carboxylic acid,
          2-{4-[bis(2-thienyl)methoxy]phenyl}-1-cyclohexylbenzimidazole-5-
        carboxylic acid,
methyl 2-\frac{4-[2-(4-\text{chlorophenyl})-5-\text{methoxybenzyloxy}]\text{phenyl}}{-1-}
        cyclohexyl-1H-indole-5-carboxylate,
           2-\{4-[2-(4-chlorophenyl)-5-methoxybenzyloxy]phenyl\}-1-cyclohexyl-
        1H-indole-5-carboxylic acid,
          methyl 2-{4-[2-(4-chlorophenyl)-5-(dimethylcarbamoyl)benzyloxy]-
35 2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylate,
          sodium 2-{4-[2-(4-chlorophenyl)-5-(dimethylcarbamoyl)benzyloxy]-
        2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylate,
```

```
2-\{4-[5-carboxy-2-(4-chlorophenyl)benzyloxy]-2-fluorophenyl\}-1-
        cyclohexylbenzimidazole-5-carboxylic acid,
          2-\{4-[2-(4-carboxyphenyl)-5-methoxybenzyloxy]phenyl\}-1-
        cyclohexylbenzimidazole-5-carboxylic acid,
 5 2-{4-[2-(4-carbamoylphenyl)-5-(dimethylcarbamoyl)benzyloxy]-
       phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid,
          2-\{4-[5-amino-2-(4-chlorophenyl)benzyloxy]phenyl\}-1-
        cyclohexylbenzimidazole-5-carboxylic acid,
          2-{4-[5-(4-chlorophenyl)-2-methoxybenzylsulfinyl]phenyl}-1-
10 cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
          2-\{4-[5-(4-chlorophenyl)-2-methoxybenzylsulfonyl]phenyl\}-1-
        cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
          2-\{4-[2-(4-chlorophenyl)-5-methoxybenzylthio]phenyl\}-1-
        cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
15 2-{4-[bis(4-carboxyphenyl)methoxy]-2-fluorophenyl}-1-
        cyclohexylbenzimidazole-5-carboxylic acid,
          2-[4-(phenyl-3-pyridylmethoxy)-2-fluorophenyl]-1-
        cyclohexylbenzimidazole-5-carboxylic acid,
          methyl 2-\frac{4-[2-(4-\text{chlorophenyl})-5-(\text{methylcarbamoyl})\text{benzyloxy}]-2-
20 fluorophenyl \-1-cyclohexylbenzimidazole-5-carboxylate,
          2-\{4-[5-chloro-2-(4-pyridyl)benzyloxy]phenyl\}-1-
        cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
          2-4-[2-(4-chlorophenyl)-5-(benzylcarbamoyl)benzyloxy]phenyl}-1-
        cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
25 2-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}
       benzyloxy]phenyl \}-1-cyclohexylbenzimidazole-5-carboxylic acid
        hydrochloride,
          2-{4-[2-(4-chlorophenyl)-5-(4-pyridylmethylcarbamoyl)-
       benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
30 dihydrochloride,
          2-{4-[2-(4-chlorophenyl)-5-(N-benzyl-N-methylcarbamoyl)-
        benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
        hydrochloride,
        2-\frac{4-[5-dimethylaminocarbonyl-2-(4-pyridyl)benzyloxy]phenyl\frac{1-1-1}{2-1}
35 cyclohexylbenzimidazole-5-carboxylic acid dihydrochloride,
          2-\frac{4-[2-(4-\text{chlorophenyl})-5-(4-\text{methylpiperazin}-1-
        ylcarbonyl)benzyloxylphenyl}-1-cyclohexylbenzimidazole-5-
        carboxylic acid dihydrochloride,
```

```
2-\frac{4-[2-(4-\text{chlorophenyl})-5-\{N-(3-\text{pyridylmethyl})\text{ carbamoyl}\}-
        benzyloxy]phenyl \rangle -1-cyclohexylbenzimidazole -5-carboxylic acid
        dihydrochloride,
          2-\{4-[2-(4-chlorophenyl)-5-\{N-(2-pyridylmethyl) carbamoyl\}-
 5 benzyloxy]phenyl \rangle -1-cyclohexylbenzimidazole-5-carboxylic acid
        dihydrochloride,
          2-\frac{1}{4}-[2-(4-\text{chlorophenyl})-5-(\text{cyclohexylcarbamoyl})\text{benzyloxy}]-
        phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
          2-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{
10 benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
        dihydrochloride,
          2-{4-[(4-fluorophenyl){4-(dimethylaminocarbonyl)phenyl}methoxy]-2-
        fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid,
          2-{4-[(4-fluorophenyl)(4-carboxyphenyl)methoxy]-2-fluorophenyl}-
15 1-cyclohexylbenzimidazole-5-carboxylic acid,
          2-\frac{4-(2-(4-\text{chlorophenyl})-5-(4-\text{oxopiperidinocarbonyl})-5}{4-(2-(4-\text{chlorophenyl})-5-(4-\text{oxopiperidinocarbonyl})-6}
        benzyloxylphenyl \-1-cyclohexylbenzimidazole-5-carboxylic acid
        hydrochloride,
          2-\{4-[2-(4-chlorophenyl)-5-hydroxybenzyloxy]phenyl\}-1-
20 cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
          2-{4-[2-(4-chlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]phenyl}-
        1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
           2-{4-[2-(4-chlorophenyl)-5-(N-isopropyl-N-methylcarbamoyl)-
        benzyloxy]phenyl \| -1-cyclohexylbenzimidazole-5-carboxylic acid
25 hydrochloride,
          2-\frac{4-[2-(4-chlorophenyl)-5-(phenylcarbamoyl)benzyloxy]phenyl}{-1-}
        cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
           2-\{4-[2-(4-chlorophenyl)-5-(4-methoxypiperidinocarbonyl)-
        benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
30 hydrochloride,
          2-\{4-[2-(4-chlorophenyl)-5-(3-hydroxypropyloxy) benzyloxy] phenyl}
        1-cyclohexylbenzimidazole-5-carboxylic acid,
           2-\{4-[2-(4-chlorophenyl)-5-(2-hydroxyethoxy)benzyloxy]phenyl\}-1-
        cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
35 methyl 2-[4-(2-bromo-5-nitrobenzyloxy)-2-fluorophenyl]-1-
        cyclohexylbenzimidazole-5-carboxylate,
          methyl 2-[4-{2-(4-chlorophenyl)-5-nitrobenzyloxy}-2-
         fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylate,
```

```
methyl 2-[4-(5-amino-2-(4-chlorophenyl)benzyloxy)-2-
               fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylate,
                 methyl 2-[4-](2-(4-chlorophenyl)-5-(2-oxopyrrolidin-1-
               yl)benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-
     5 carboxylate,
                 2-[4-\{2-(4-\text{chlorophenyl})-5-(2-\text{oxopyrrolidin}-1-\text{yl})\text{benzyloxy}\}-2-
               fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid
              hydrochloride,
                 2-\frac{4}{2} [2-(4-chlorophenyl)-5-(4-methylpiperidin-1-
 10 ylcarbonyl)benzyloxy]phenyl \}-1-cyclohexylbenzimidazole-5-
              carboxylic acid hydrochloride,
                 2-4-[5-acetyl-2-(4-chlorophenyl)benzyloxy]phenyl}-1-
              cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
                 2-4-[2-(4-chlorophenyl)-5-4(4-hydroxypiperidin-1-ylcarbonyl)-
 15 methoxy\benzyloxy]phenyl\-1-cyclohexylbenzimidazole-5-carboxylic
              acid,
                2-\frac{4-[2-(4-chlorophenyl)-5-(2-methoxyethoxy)benzyloxy]phenyl}{-1-}
              cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
                2-4-[2-(4-chlorophenyl)-5-2-(2-methoxyethoxy)]
 20 benzyloxy]phenyl \-1-cyclohexylbenzimidazole-5-carboxylic acid
             hydrochloride,
                2-{4-[2-(4-chlorophenyl)-5-(isobutylcarbonyl)benzyloxy]phenyl}-1-
             cyclohexylbenzimidazole-5-carboxylic acid,
                2-\sqrt{4-[2-(4-chlorophenyl)-5-(2-methylthiazol-4-yl)benzyloxy]}
25 phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid,
                2-\frac{1}{4}-[2-(4-\text{chlorophenyl})-5-(3,4-\text{dihydroxypiperidin}-1-
             ylcarbonyl)benzyloxylphenyl \}-1-cyclohexylbenzimidazole-5-
             carboxylic acid hydrochloride,
                2-\frac{4}{2}-\frac{2}{4}-\frac{2}{4}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{4}{2}-\frac{
30 yl)benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
             hydrochloride,
                2-{4-[2-(4-chlorophenyl)-4-(isopropylcarbamoyl)benzyloxy]phenyl}-
            1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
               2-\frac{4-[2-(4-chlorophenyl)-4-(piperidinocarbonyl)benzyloxy]phenyl}{-}
35 1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
               2-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{1}{4}-\frac{
            yl)carbamoylbenzyloxy]phenylb-1-cyclohexylbenzimidazole-5-
            carboxylic acid hydrochloride,
```

2-{4-[2-(4-chlorophenyl)-5-(4,4-dimethyl-2-oxazolin-2-

```
yl)benzyloxy]phenyl \rangle -1-cyclohexylbenzimidazole -5-carboxylic acid
            dihydrochloride,
                2-44-[2-(4-chlorophenyl)-4-(4-hydroxypiperidin-1-
   5 ylcarbonyl)benzyloxy]phenyl\rangle-1-cyclohexylbenzimidazole-5-
            carboxylic acid hydrochloride,
                2-\{4-[2-(4-chlorophenyl)-4-\{(2-hydroxyethyl)carbamoyl\}-
            benzyloxy|phenyl \| -1-cyclohexylbenzimidazole-5-carboxylic acid
            hydrochloride,
10 2-\frac{4-[2-(4-\text{chlorophenyl})-4-{(4-\text{pyridylmethyl}) carbamoyl}}{-}
            benzyloxy]phenyl \-1-cyclohexylbenzimidazole-5-carboxylic acid,
                2-\{4-[2-(4-chlorophenyl)-4-(dimethylcarbamoyl)benzyloxy]phenyl\}-
            1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
                2-\{4-[5-(2-aminothiazol-4-yl)-2-(4-chlorophenyl)benzyloxy]-
15 phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
            dihydrochloride,
                2-\frac{4}{10}=(4-\text{chlorophenyl})-5-(4-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydroxypiperidin}-1-\text{hydr
            ylsulfonyl)benzyloxy]phenyl \rangle -1-cyclohexylbenzimidazole-5-
            carboxylic acid hydrochloride,
               2-{4-[5-(dimethylcarbamoyl)-2-(4-fluorophenyl)benzyloxy]phenyl}-
            1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
                2-\frac{4-[5-(dimethylcarbamoyl)-2-(3-fluorophenyl)benzyloxy]phenyl}{-}
            1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
                2-\frac{1}{4}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{1}{2}-\frac{
25 phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
                2-\{4-[2-bromo-5-(5-methyloxazol-2-yl)benzyloxy]phenyl\}-1-
            cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
                2-\{4-[2-bromo-5-(5-methylthiazol-2-yl)benzyloxy]phenyl\}-1-
            cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
30 \quad 2-4-[2-(4-chlorophenyl)-5-(5-methyloxazol-2-yl)benzyloxy]-
            phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
                2-\{4-[2-(4-chlorophenyl)-5-(5-methylthiazol-2-yl)benzyloxy]-
            phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
                2-\{4-[2-(4-chlorophenyl)-5-tetrazol-5-ylbenzyloxy]phenyl\}-1-
35 cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
                2-\{4-[5-chloro-2-(4-cyanophenyl)benzyloxy]phenyl\}-1-
            cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
```

```
2-\delta-[5-chloro-2-(4-tetrazol-5-ylphenyl)benzyloxy]phenyl\delta-1-
cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
2-\delta-[2-(4-chlorophenyl)-5-\delta-(4-hydroxypiperidin-1-
yl)ethoxy\benzyloxy]phenyl\delta-1-cyclohexylbenzimidazole-5-carboxylic
acid hydrochloride,
2-\delta-[2-(4-chlorophenyl)-5-(2-oxopiperidin-1-yl)benzyloxy]-2-
flyorophonyl\delta-1-cyclohexylbenzimidazole-5-carboxylic
```

- 2-{4-[2-(4-chlorophenyl)-5-(2-oxopiperidin-1-yl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-4-[3-(4-chlorophenyl)-5-(dimethylcarbamoyl)benzyloxy]-2-
- 10 fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
 hydrochloride,
 - 2-{4-[2-(4-chlorophenyl)-5-(N-hydroxyamidino)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid dihydrochloride,
- 2-\delta-[2-(4-chlorophenyl)-5-(2,5-dihydro-5-oxo-4H-1,2,4-oxadiazol-3-yl)benzyloxy]-2-fluorophenyl\delta-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-{4-[2-(4-chlorophenyl)-5-(2-oxo-3H-1,2,3,5-oxathiadiazol-4-yl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-
- 20 carboxylic acid hydrochloride,
 - 2-{4-[2-(4-chlorophenyl)-5-(2,5-dihydro-5-oxo-4H-1,2,4-thiadiazol-3-yl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride, 2-{4-[2-(4-chlorophenyl)-5-(cyclopropylcarbamoyl)benzyloxy]-2-
- 25 fluorophenyl \rangle -1-cyclohexylbenzimidazole -5-carboxylic acid hydrochloride,
 - $2-\sqrt{4-[2-(4-\text{chlorophenyl})-5-(\text{cyclobutylcarbamoyl})\text{benzyloxy}]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,$
- 30 2-√4-[2-(4-chlorophenyl)-5-(tert-butylcarbamoyl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-\dagger4-[2-(4-chlorophenyl)-5-(isobutylcarbamoyl)benzyloxy]-2-fluorophenyl\dagger-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-\(\frac{4-[2-(4-chlorophenyl)-5-\(\frac{(1-hydroxypropan-2-yl)carbamoyl\}-\)
 benzyloxy]-2-fluorophenyl\(\frac{2-(1-hydroxypropan-2-yl)carbamoyl\}-\)
 acid hydrochloride,

- 2-{4-[2-(4-chlorophenyl)-5-(methoxycarbamoyl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- $2-\frac{4-[2-(4-chlorophenyl)-5-{(2,3-dihydroxypropyl)carbamoyl}-$
- 5 benzyloxy]-2-fluorophenyl \rangle -1-cyclohexylbenzimidazole-5-carboxylic
 acid hydrochloride,
 - 2-{4-[2-(4-chlorophenyl)-5-(N-ethyl-N-methylcarbamoyl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 10 2-{4-[2-(4-chlorophenyl)-5-(N-methyl-N-propylcarbamoyl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic
 acid hydrochloride,
- 2-{4-[2-(4-chlorophenyl)-5-(N-isopropyl-N-methylcarbamoyl)-benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-{4-[2-(4-chlorophenyl)-5-(2,6-dimethylpiperidin-1-ylcarbonyl)-benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-{4-[5-(butylcarbamoyl)-2-(4-chlorophenyl)benzyloxy}-2-
- 20 fluorophenyl \}-1-cyclohexylbenzimidazole-5-carboxylic acid
 hydrochloride,
 - 2-{4-[2-(4-chlorophenyl)-5-(propylcarbamoyl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 25 2-{4-[2-(4-chlorophenyl)-5-(ethylcarbamoyl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-{4-[2-(4-chlorophenyl)-5-{(dimethylcarbamoyl)amino}benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
- 30 hydrochloride,
 - 2-{4-[2-(4-chlorophenyl)-5-{(morpholinocarbonyl)amino}benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - $2-\{4-[2-(4-chlorophenyl)-5-ureidobenzyloxy]-2-fluorophenyl\}-1-$
- 35 cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-{4-[2-(4-chlorophenyl)-5-{(ethylcarbamoyl)amino}benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,

- 2-{4-[2-(4-chlorophenyl)-5-{(isopropylcarbamoyl)amino}benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- $2-\{4-[2-(3,4-difluorophenyl)-5-(isopropylcarbamoyl)benzyloxy]-2-$
- 5 fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid,
 - 2-\delta-[2-(2,4-difluorophenyl)-5-(isopropylcarbamoyl)benzyloxy]-2-fluorophenyl\delta-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-{4-[2-(3,5-dichlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]-210 fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
 hydrochloride,
 - 2-{4-[2-(3-chloro-4-fluorophenyl)-5-(isopropylcarbamoyl)-benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 15 2-{4-[2-(3,4-dichlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]-2fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
 hydrochloride,
- 2-{4-[2-(4-chloro-2-fluorophenyl)-5-(isopropylcarbamoyl)-benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-{4-[2-(4-chloro-2-fluorophenyl)-5-(pyrrolidin-1-ylcarbonyl)-benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-{4-[2-(4-chloro-3-fluorophenyl)-5-(pyrrolidin-1-ylcarbonyl)25 benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic
 acid hydrochloride,
 - 2-{4-[2-(4-chloro-3-fluorophenyl)-5-(isopropylcarbamoyl)-benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-{4-[2-{4-(methylthio)phenyl}-5-(2-oxopyrrolidin-1-yl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-{4-[2-{4-(methylthio)phenyl}-5-(isopropylcarbamoyl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-{4-[4-chloro-2-(4-chlorophenyl)-5-(1,1-dioxoisothiazolidin-2-yl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,

- 2-{4-[4-chloro-2-(4-chlorophenyl)-5-(2-oxopyrrolidin-1-yl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-{4-[2-(4-chlorophenyl)-5-(isopropylaminosulfonyl)benzyloxy]-25 fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
- fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-{4-[2-(4-chlorophenyl)-5-(dimethylcarbamoyl)benzyloxy]-2-fluorophenyl}-1-cyclopentylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-{4-[2-(4-chlorophenyl)-5-(4-hydroxypiperidin-1-ylcarbonyl)benzyloxy]-2-fluorophenyl}-1-cyclopentylbenzimidazole-5-carboxylic
 acid hydrochloride,
- 2-{4-[2-(4-chlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]-2-fluorophenyl}-1-cyclopentylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-{4-[2-(4-chlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]phenyl}-1-cyclopentylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-{4-[2-(4-chlorophenyl)-5-(dimethylcarbamoyl)benzyloxy]phenyl}-1-cyclopentylbenzimidazole-5-carboxylic acid hydrochloride,
- 20 2-{4-[2-(4-chlorophenyl)-5-(4-hydroxypiperidin-1-ylcarbonyl)benzyloxy]phenyl}-1-cyclopentylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-{4-[2-(4-chlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]phenyl}1-(tetrahydrothiopyran-4-yl)benzimidazole-5-carboxylic acid
 25 hydrochloride,
 - 2-{4-[2-(4-chlorophenyl)-5-(pyrrolidin-1-ylcarbonyl)benzyloxy]-phenyl}-1-(tetrahydrothiopyran-4-yl)benzimidazole-5-carboxylic acid hydrochloride,
 - 2-{4-[2-(4-chlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]-2-
- fluorophenyl \-1-(tetrahydrothiopyran-4-yl)benzimidazole-5-carboxylic acid hydrochloride,
 - 2-{4-[2-(4-chlorophenyl)-5-(2-oxopyrrolidin-1-yl)benzyloxy]-2-fluorophenyl}-1-(tetrahydrothiopyran-4-yl)benzimidazole-5-carboxylic acid hydrochloride,
- 35 2-{4-[2-(4-chlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]-2fluorophenyl}-1-piperidinobenzimidazole-5-carboxylic acid hydrochloride,

```
2-{4-[2-(4-chlorophenyl)-5-(pyrrolidin-1-ylcarbonyl)benzyloxy]-2-fluorophenyl}-1-piperidinobenzimidazole-5-carboxylic acid,
2-{4-[2-(4-chlorophenyl)-5-(2-imidazolin-2-yl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid

5 dihydrochloride,
```

- 2-\delta-[2-(4-chlorophenyl)-5-(2-oxooxazolidin-3-yl)benzyloxy]-2-fluorophenyl\delta-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-{4-[2-(4-chlorophenyl)-5-(2-oxoimidazolidin-1-yl)benzyloxy]-210 fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
 hydrochloride,
 - 2-\dangle4-[2-(4-chlorophenyl)-5-(2-oxazolin-2-ylamino)benzyloxy]-2-fluorophenyl\dangle-1-cyclohexylbenzimidazole-5-carboxylic acid dihydrochloride,
- 15 2-{4-[{2-[{(dimethylcarbamoyl)methoxy}methyl]-4-(4fluorophenyl)thiazol-5-yl\methoxy]phenyl\}-1cyclohexylbenzimidazole-5-carboxylic acid hydrochloride, 2-{4-[{4-(4-fluorophenyl)-2-(4-hydroxypiperidin-1ylmethyl)thiazol-5-yl\methoxy]phenyl\}-1-cyclohexylbenzimidazole-5-20 carboxylic acid dihydrochloride,
 - 2-{4-[4-(4-fluorophenyl)-2-[(carbamoylmethoxy)methyl]thiazol-5-yl}methoxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-4-[4-(4-fluorophenyl)-2-(methylcarbamoyl)thiazol-5-
- 25 yl}methoxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-{4-[{4-(4-fluorophenyl)-2-{(2-hydroxyethyl)carbamoyl}thiazol-5-yl}methoxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-\d-[\d-[\d-fluorophenyl)-5-(dimethylcarbamoyl) thiophen-3yl\methoxy]-2-fluorophenyl\d-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-{4-[{2-(4-fluorophenyl)-5-(isopropylcarbamoyl) thiophen-3-yl}methoxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-{4-[{2-(4-fluorophenyl)-5-(4-hydroxypiperidin-1-ylcarbonyl)thiophen-3-yl}methoxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,

```
2-\frac{1}{4} (4-chlorophenyl) -5- (dimethylcarbamoyl) benzyloxy] -2-
   fluorophenyl \}-1-cyclohexyl-5-tetrazol-5-ylbenzimidazole,
    2-\{4-[2-(4-carboxyphenyl)-5-chlorobenzyloxy]-2-fluorophenyl\}-1-
   cyclohexyl-5-tetrazol-5-ylbenzimidazole hydrochloride,
5 2-\frac{4-[2-(4-chlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]-2-
   fluorophenyl \rangle -1-cyclohexyl-5-(2,5-dihydro-5-oxo-4H-1,2,4-
   oxadiazol-3-yl)benzimidazole hydrochloride,
    2-{4-[5-carboxy-2-(4-chlorophenyl)benzyloxy]-2-fluorophenyl}-5-
   cyano-1-cyclohexylbenzimidazole,
10 2-\frac{4-[2-(4-\text{chlorophenyl})-5-(\text{dimethylcarbamoyl})\text{benzyloxy}]-2-
   fluorophenyl \-5-cyano-1-cyclohexylbenzimidazole,
    2-{4-[{N-(4-dimethylcarbamoyl)-N-(4-fluorophenyl)amino}-
   methyl]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid,
    2-\{5-[bis(3-fluorophenyl), methyl]-2-fluoro-4-hydroxyphenyl\}-1-
15 cyclohexylbenzimidazole-5-carboxylic acid,
    2-{3-[bis(3-fluorophenyl)methyl]-2-fluoro-4-hydroxyphenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid,
    2-{4-[(3-dimethylcarbamoylphenyl)(4-fluorophenyl)methoxy]-2-
   fluorophenyl \}-1-cyclohexylbenzimidazole-5-carboxylic acid
20 hydrochloride,
    2-{4-[{3-(4-hydroxypiperidyl-1-ylcarbonyl)phenyl}(4-
   fluorophenyl)methoxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-
   carboxylic acid hydrochloride,
    1-\{[2-\{4-([4-(4-fluorophenyl)-2-methylthiazol-5-
25 yl]methoxy)phenyl\{-1-cyclohexylbenzimidazol-5-yl]carbonyl\}-\beta-D-
   glucuronic acid,
    {[2-{4-[bis(3-fluorophenyl)methoxy]-2-fluorophenyl}-1-
   cyclohexylbenzimidazol-5-yl]carbonyl\left\{-\beta-D-g\right\}ucuronic acid,
    2-\{4-[2-(4-chlorophenyl)-5-(1,1-dioxoisothiazolidin-2-
30 yl)benzyloxy]-2-fluorophenyl\-1-cyclohexylbenzimidazole-5-
   carboxylic acid hydrochloride,
   3-{[4-(5-aminosulfonyl-1-cyclohexylbenzimidazol-2-yl)-3-
   fluorophenoxy]methyl}-4-(4-chlorophenyl)-N-isopropylbenzamide,
    2-[4-{2-(4-chlorophenyl)-6-(isopropylaminocarbonyl)benzyloxy}-2-
35 fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid
   hydrochloride,
```

```
2-[4-{2-(4-chlorophenyl)-4-fluoro-5-(1,1-dioxoisothiazolidin-2-yl)benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
```

- 2-[4-{2-(4-chlorophenyl)-5-(isopropylaminocarbonyl)benzyloxy}-2-
- 5 fluorophenyl]-1-cyclohexyl-4-methoxybenzimidazole-5-carboxylic acid hydrochloride,
 - 2-[4-{2-(4-chlorophenyl)-5-(N-isopropylcarbonyl-N-methylamino)benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 10 2-[4-{2-(4-chlorophenyl)-5-(isopropylcarbonylamino)benzyloxy}-2fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid
 hydrochloride,
 - 2-[3-{[4-(4-fluorophenyl)-2-methylthiazol-5-yl]methyl}-4-hydroxyphenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid,
- 2-[4-{2-(4-chlorophenyl)-4-fluoro-5-(2-oxopyrrolidin-1-yl)benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-[4-{2-(4-chlorophenyl)-5-(methylsulfonylamino)benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid
- 20 hydrochloride,
 - 2-[4-{2-(4-chlorophenyl)-5-[N-methyl-N-(methylsulfonyl)amino]benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 2-[4-{[3-(4-chlorophenyl)-6-(2-oxopyrrolidin-1-yl)pyridin-2-
- 25 yl]methyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5carboxylic acid hydrochloride,
 - 2-[4-{2-(4-chlorophenyl)-5-(acetylamino)benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-[4-{2-(4-chlorophenyl)-5-(N-acetyl-N-ethylamino)benzyloxy}-2fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid
 hydrochloride,
 - 2-[4-{2-(4-chlorophenyl)-5-(N-acetyl-N-propylamino)benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid
- 35 hydrochloride,
 - 2-[4-{2-(4-chlorophenyl)-5-[N-ethyl-N-(methylsulfonyl)amino]-benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,

- 2-[4-{2-(4-chlorophenyl)-5-[N-(methylsulfonyl)-N-propylamino]benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-[4-{2-(4-chlorophenyl)-5-(N-acetyl-N-methylamino)benzyloxy}-2-
- 5 fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-[4-{2-(4-chlorophenyl)-5-[N-(ethylsulfonyl)-N-methylamino]-benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-[4-{2-(4-chlorophenyl)-5-[N-ethyl-N-(ethylsulfonyl)amino]benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic
 acid hydrochloride,
- 2-[4-{2-(4-chlorophenyl)-5-[N-(ethylcarbonyl)-N-methylamino]-benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-[4-{2-(4-chlorophenyl)-5-[N-ethyl-N-(ethylcarbonyl)amino]-benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-[4-{2-(4-chlorophenyl)-5-methoxybenzyloxy}-2-fluorophenyl]-1-20 cyclohexylbenzimidazole-5-carboxylic acid,
 - 2-[4-{2-(4-chlorophenyl)-5-(N-acetyl-N-isopropylamino)-benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - $\{[2-\{4-[2-(4-chlorophenyl)-5-(2-oxopyrrolidin-1-yl)benzyloxy]-2-$
- fluorophenyl}-1-cyclohexylbenzoimidazol-5-yl]carbonyl}- β -D-glucuronic acid,
 - methyl 2-{4-[2-(4-chlorophenyl)-5-methoxybenzyloxy]phenyl}-1-cyclohexylindole-5-carboxylate,
- 2-{4-[2-(4-chlorophenyl)-5-methoxybenzyloxy]phenyl}-1-cyclohexyl30 1H-indole-5-carboxylic acid,
 - 2-(4-benzyloxyphenyl)-1-cyclopentyl-1H-indole-5-carboxylic acid, ethyl 2-(4-benzyloxyphenyl)-3-cyclohexylimidazo[1,2-a]pyridine-7-carboxylate,
- 2-(4-benzyloxyphenyl)-3-cyclohexylimidazo[1,2-a]pyridine-735 carboxylic acid,
 - 2-{4-[2-(4-chlorophenyl)-5-methoxybenzyloxy]phenyl}-3-cyclohexyl-3H-imidazo[4,5-b]pyridine-6-carboxylic acid,

- 2-{4-[2-(4-chlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]phenyl}-3-cyclohexyl-3H-imidazo[4,5-b]pyridine-6-carboxylic acid hydrochloride, and
- 2-{4-[2-(4-chlorophenyl)-5-(pyrrolidin-1-ylcarbonyl)benzyloxy]5 phenyl}-3-cyclohexyl-3H-imidazo[4,5-b]pyridine-6-carboxylic acid hydrochloride.
 - 62. The fused ring compound of claim 61 or a pharmaceutically acceptable salt thereof, which is selected from the group consisting of
- 2-{4-[2-(4-chlorophenyl)-5-(4-oxopiperidinocarbonyl)benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
 hydrochloride,
 - 2-{4-[2-(4-chlorophenyl)-5-hydroxybenzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-{4-[2-(4-chlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]phenyl}1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 2-{4-[2-(4-chlorophenyl)-5-(N-isopropyl-N-methylcarbamoyl)benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
 hydrochloride,
- 20 2-{4-[2-(4-chlorophenyl)-5-(phenylcarbamoyl)benzyloxy]phenyl}-1cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 2-{4-[2-(4-chlorophenyl)-5-(4-methoxypiperidinocarbonyl) benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
 hydrochloride,
- 25 2-{4-[2-(4-chlorophenyl)-5-(3-hydroxypropyloxy)benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid,
 - 2-{4-[2-(4-chlorophenyl)-5-(2-hydroxyethoxy)benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- methyl 2-[4-(2-bromo-5-nitrobenzyloxy)-2-fluorophenyl]-1-
- 30 cyclohexylbenzimidazole-5-carboxylate,
 - methyl 2-[4-{2-(4-chlorophenyl)-5-nitrobenzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylate,
 - methyl 2-[4-{5-amino-2-(4-chlorophenyl)benzyloxy}-2-
 - fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylate,
- methyl 2-[4-{2-(4-chlorophenyl)-5-(2-oxopyrrolidin-1-yl)benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylate,

- 5 ylcarbonyl)benzyloxy]phenyl \rangle -1-cyclohexylbenzimidazole-5carboxylic acid hydrochloride,
 - 2-{4-[5-acetyl-2-(4-chlorophenyl)benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-{4-[2-(4-chlorophenyl)-5-{(4-hydroxypiperidin-1-ylcarbonyl)-
- no methoxy{benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid,
 - 2-{4-[2-(4-chlorophenyl)-5-(2-methoxyethoxy)benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - $2-\frac{4-[2-(4-chlorophenyl)-5-\frac{2-(2-methoxyethoxy)ethoxy}{-}$
- 15 benzyloxy]phenyl \rangle -1-cyclohexylbenzimidazole-5-carboxylic acid
 hydrochloride,
 - 2-{4-[2-(4-chlorophenyl)-5-(isobutylcarbonyl)benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid,
 - $2-\frac{4-[2-(4-chlorophenyl)-5-(2-methylthiazol-4-yl)benzyloxy]-$
- 20 phenyl \-1-cyclohexylbenzimidazole-5-carboxylic acid,
 - 2-{4-[2-(4-chlorophenyl)-5-(3,4-dihydroxypiperidin-1-ylcarbonyl)benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - $2-\frac{1}{4}-[2-(4-\text{chlorophenyl})-5-(3-\text{methyl}-1,2,4-\text{oxadiazol}-5-$
- 25 yl)benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-\\d-[2-(4-chlorophenyl)-4-(isopropylcarbamoyl)benzyloxy]phenyl\\1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-{4-[2-(4-chlorophenyl)-4-(piperidinocarbonyl)benzyloxy]phenyl}-
- 30 1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-4-[2-(4-chlorophenyl)-5-(1-hydroxy-2-methylpropan-2-
 - yl)carbamoyl\benzyloxy]phenyl\-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - $2-\frac{1}{4}-\frac{1}{2}-\frac{1}{4}-\frac{1}{2}-\frac{$
- y1)benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid dihydrochloride,

```
2-{4-[2-(4-chlorophenyl)-4-(4-hydroxypiperidin-1-
   ylcarbonyl)benzyloxylphenyl \}-1-cyclohexylbenzimidazole-5-
   carboxylic acid hydrochloride,
    2-4-[2-(4-chlorophenyl)-4-\{(2-hydroxyethyl) carbamoyl\}-
5 benzyloxy]phenyl \rangle -1-cyclohexylbenzimidazole-5-carboxylic acid
   hydrochloride,
    2-\frac{4-[2-(4-\text{chlorophenyl})-4-\{(4-\text{pyridylmethyl}) \text{ carbamovl}\}-
   benzyloxy]phenyl \-1-cyclohexylbenzimidazole-5-carboxylic acid,
    2-{4-[2-(4-chlorophenyl)-4-(dimethylcarbamoyl)benzyloxy]phenyl}-
10 1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
    2-\frac{4-[5-(2-aminothiazol-4-yl)-2-(4-chlorophenyl)benzyloxy]-
   phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
   dihydrochloride,
    2-\{4-[2-(4-chlorophenyl)-5-(4-hydroxypiperidin-1-
15 ylsulfonyl) benzyloxy|phenyl \rightarrow 1-cyclohexylbenzimidazole-5-
   carboxylic acid hydrochloride,
    2-\frac{1}{4}-[5-(dimethylcarbamoyl)-2-(4-fluorophenyl)benzyloxy]phenyl
   1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
    2-\frac{4-[5-(dimethylcarbamoyl)-2-(3-fluorophenyl)benzyloxy]phenyl}{-}
20 1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
    2-{4-[2-(5-chlorothiophen-2-yl)-5-(dimethylcarbamoyl)benzyloxy]-
   phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
    2-\{4-[2-bromo-5-(5-methyloxazol-2-yl)benzyloxy]phenyl\}-1-
   cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
25 2-\frac{4-[2-bromo-5-(5-methylthiazol-2-yl)benzyloxy]phenyl}{-1-}
   cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
    2-\frac{4-[2-(4-\text{chlorophenyl})-5-(5-\text{methyloxazol}-2-\text{yl})\text{benzyloxy}]-
   phenyl \-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
    2-\{4-[2-(4-chlorophenyl)-5-(5-methylthiazol-2-yl)benzyloxy]-
30 phenyl \-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
    2-\{4-[2-(4-chlorophenyl)-5-tetrazol-5-ylbenzyloxy]phenyl\}-1-
   cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
    2-\{4-[5-chloro-2-(4-cyanophenyl)benzyloxy]phenyl\}-1-
   cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
2-4-[5-chloro-2-(4-tetrazol-5-ylphenyl)benzyloxy]phenyl}-1-
   cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
    2-\left\{4-\left[2-\left(4-\text{chlorophenyl}\right)-5-\right\}2-\left(4-\text{hydroxypiperidin-1}-\right)\right\}
```

- yl)ethoxy{benzyloxy]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-{4-[2-(4-chlorophenyl)-5-(2-oxopiperidin-1-yl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid bydrochloride,
 - 2-{4-[3-(4-chlorophenyl)-5-(dimethylcarbamoyl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - $2-\frac{1}{4}-[2-(4-chlorophenyl)-5-(N-hydroxyamidino)benzyloxy]-2-$
- 10 fluorophenyl \}-1-cyclohexylbenzimidazole-5-carboxylic acid
 dihydrochloride,
 - 2-{4-[2-(4-chlorophenyl)-5-(2,5-dihydro-5-oxo-4H-1,2,4-oxadiazol-3-yl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-\delta-[2-(4-chlorophenyl)-5-(2-oxo-3H-1,2,3,5-oxathiadiazol-4-yl)benzyloxy]-2-fluorophenyl\delta-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-{4-[2-(4-chlorophenyl)-5-(2,5-dihydro-5-oxo-4H-1,2,4-thiadiazol-3-yl)benzyloxy]-2-fluorophenyl}-1-
- 20 cyclohexylbenzimidazole-5-carboxylic acid hydrochloride, 2-{4-[2-(4-chlorophenyl)-5-(cyclopropylcarbamoyl)benzyloxy]-2
 - fluorophenyl \-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-4-[2-(4-chlorophenyl)-5-(cyclobutylcarbamoyl)benzyloxy]-2-
- 25 fluorophenyl \rangle -1-cyclohexylbenzimidazole-5-carboxylic acid
 hydrochloride,
 - 2-{4-[2-(4-chlorophenyl)-5-(tert-butylcarbamoyl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-{4-[2-(4-chlorophenyl)-5-(isobutylcarbamoyl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-{4-[2-(4-chlorophenyl)-5-{(1-hydroxypropan-2-yl)carbamoyl}-benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-{4-[2-(4-chlorophenyl)-5-(methoxycarbamoyl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,

- 2-{4-[2-(4-chlorophenyl)-5-{(2,3-dihydroxypropyl)carbamoyl}-benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-{4-[2-(4-chlorophenyl)-5-(N-ethyl-N-methylcarbamoyl)benzyloxy]-
- 5 2-fluorophenyl\-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-\delta-[2-(4-chlorophenyl)-5-(N-methyl-N-propylcarbamoyl)-benzyloxy]-2-fluorophenyl\delta-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-{4-[2-(4-chlorophenyl)-5-(N-isopropyl-N-methylcarbamoyl)-benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-{4-[2-(4-chlorophenyl)-5-(2,6-dimethylpiperidin-1-ylcarbonyl)-benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-{4-[5-(butylcarbamoy1)-2-(4-chlorophenyl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - $2-\frac{4-[2-(4-chlorophenyl)-5-(propylcarbamoyl)benzyloxy]-2-$
- 20 fluorophenyl }-1-cyclohexylbenzimidazole-5-carboxylic acid
 hydrochloride,
 - 2-{4-[2-(4-chlorophenyl)-5-(ethylcarbamoyl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 25 2-{4-[2-(4-chlorophenyl)-5-{ (dimethylcarbamoyl) amino benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-{4-[2-(4-chlorophenyl)-5-{ (morpholinocarbonyl) amino}benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-{4-[2-(4-chlorophenyl)-5-ureidobenzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-{4-[2-(4-chlorophenyl)-5-{(ethylcarbamoyl)amino}benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-{4-[2-(4-chlorophenyl)-5-{(isopropylcarbamoyl)amino}benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,

- 2-{4-[2-(3,4-difluorophenyl)-5-(isopropylcarbamoyl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid,
- 2-{4-[2-(2,4-difluorophenyl)-5-(isopropylcarbamoyl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid
- 5 hydrochloride,
 - 2-{4-[2-(3,5-dichlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-{4-[2-(3-chloro-4-fluorophenyl)-5-(isopropylcarbamoyl)-
- 10 benzyloxy]-2-fluorophenyl \}-1-cyclohexylbenzimidazole-5-carboxylic
 acid hydrochloride,
 - 2-\delta-[2-(3,4-dichlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]-2-fluorophenyl\delta-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-{4-[2-(4-chloro-2-fluorophenyl)-5-(isopropylcarbamoyl)-benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-\delta-[2-(4-chloro-2-fluorophenyl)-5-(pyrrolidin-1-ylcarbonyl)-benzyloxy]-2-fluorophenyl\delta-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-{4-[2-(4-chloro-3-fluorophenyl)-5-(pyrrolidin-1-ylcarbonyl)-benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-{4-[2-(4-chloro-3-fluorophenyl)-5-(isopropylcarbamoyl)-
- 25 benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic
 acid hydrochloride,
 - 2-{4-[2-{4-(methylthio)phenyl}-5-(2-oxopyrrolidin-1-yl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-\langle 4-[2-\langle 4-(methylthio)phenyl\rangle -5-(isopropylcarbamoyl)benzyloxy]-2-fluorophenyl\rangle -1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-{4-[4-chloro-2-(4-chlorophenyl)-5-(1,1-dioxoisothiazolidin-2-yl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5carboxylic acid hydrochloride,
 - 2-{4-[4-chloro-2-(4-chlorophenyl)-5-(2-oxopyrrolidin-1-yl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,

- 2-{4-[2-(4-chlorophenyl)-5-(isopropylaminosulfonyl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-{4-[2-(4-chlorophenyl)-5-(dimethylcarbamoyl)benzyloxy]-2-
- fluorophenyl -1-cyclopentylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-{4-[2-(4-chlorophenyl)-5-(4-hydroxypiperidin-1-ylcarbonyl)-benzyloxy]-2-fluorophenyl}-1-cyclopentylbenzimidazole-5-carboxylic acid hydrochloride,
- 10 2-{4-[2-(4-chlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]-2fluorophenyl}-1-cyclopentylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-{4-[2-(4-chlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]phenyl}-1-cyclopentylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-{4-[2-(4-chlorophenyl)-5-(dimethylcarbamoyl)benzyloxy]phenyl}1-cyclopentylbenzimidazole-5-carboxylic acid hydrochloride,
 2-{4-[2-(4-chlorophenyl)-5-(4-hydroxypiperidin-1ylcarbonyl)benzyloxy]phenyl}-1-cyclopentylbenzimidazole-5-
- carboxylic acid hydrochloride,

 20 2-{4-[2-(4-chlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]phenyl}
 1-(tetrahydrothiopyran-4-yl)benzimidazole-5-carboxylic acid
- 2-{4-[2-(4-chlorophenyl)-5-(pyrrolidin-1-ylcarbonyl)benzyloxy]-phenyl}-1-(tetrahydrothiopyran-4-yl)benzimidazole-5-carboxylic acid hydrochloride,
 - 2-{4-[2-(4-chlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]-2-fluorophenyl}-1-(tetrahydrothiopyran-4-yl)benzimidazole-5-carboxylic acid hydrochloride,
 - 2-4-[2-(4-chlorophenyl)-5-(2-oxopyrrolidin-1-yl)benzyloxy]-2-
- fluorophenyl}-1-(tetrahydrothiopyran-4-yl)benzimidazole-5-carboxylic acid hydrochloride,

hydrochloride,

- 2-{4-[2-(4-chlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]-2-fluorophenyl}-1-piperidinobenzimidazole-5-carboxylic acid hydrochloride,
- 2-{4-[2-(4-chlorophenyl)-5-(pyrrolidin-1-ylcarbonyl)benzyloxy]-2-fluorophenyl}-1-piperidinobenzimidazole-5-carboxylic acid,

- 2-{4-[2-(4-chlorophenyl)-5-(2-imidazolin-2-yl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid dihydrochloride,
- $2-\frac{1}{4}-[2-(4-\text{chlorophenyl})-5-(2-\text{oxooxazolidin}-3-\text{yl})\text{benzyloxy}]-2-$
- 5 fluorophenyl \(\) -1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-{4-[2-(4-chlorophenyl)-5-(2-oxoimidazolidin-1-yl)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-{4-[2-(4-chlorophenyl)-5-(2-oxazolin-2-ylamino)benzyloxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid dihydrochloride,
 - 2-\(\dagger\) 4-[\(\lambda\) 2-[\(\dagger\) (dimethylcarbamoyl) methoxy\) methyl]-4-(4-fluorophenyl) thiazol-5-yl\) methoxy] phenyl\(\rangle\)-1-
- cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,

 2-{4-[{4-(4-fluorophenyl)-2-(4-hydroxypiperidin-1ylmethyl)thiazol-5-yl}methoxy]phenyl}-1-cyclohexylbenzimidazole-5carboxylic acid dihydrochloride,
- 2-\delta-(d-fluorophenyl)-2-[(carbamoylmethoxy)methyl]thiazol-520 yl\methoxy]phenyl\delta-1-cyclohexylbenzimidazole-5-carboxylic acid
 hydrochloride,
 - 2-\(\frac{4-(4-fluorophenyl)-2-(methylcarbamoyl) thiazol-5-\)
 yl\methoxy]-2-fluorophenyl\(\frac{2-1}{2-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,\)
- 25 2-{4-[{4-(4-fluorophenyl)-2-{(2-hydroxyethyl)carbamoyl}thiazol-5-yl}methoxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-\delta-[\delta-(4-fluorophenyl)-5-(dimethylcarbamoyl)thiophen-3yl\methoxy]-2-fluorophenyl\delta-1-cyclohexylbenzimidazole-5-carboxylic 30 acid hydrochloride,
 - 2-\(\daggregarting 4-[\daggregarting 2-(4-fluorophenyl)-5-(isopropylcarbamoyl) thiophen-3yl\methoxy]-2-fluorophenyl\\-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - $2-\frac{4-[4-(4-fluorophenyl)-5-(4-hydroxypiperidin-1-$
- ylcarbonyl) thiophen-3-yl methoxy]-2-fluorophenyl -1cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 2-{4-[2-(4-chlorophenyl)-5-(dimethylcarbamoyl)benzyloxy]-2fluorophenyl -1-cyclohexyl-5-tetrazol-5-ylbenzimidazole,

- 2-{4-[2-(4-carboxyphenyl)-5-chlorobenzyloxy]-2-fluorophenyl}-1-cyclohexyl-5-tetrazol-5-ylbenzimidazole hydrochloride,
 2-{4-[2-(4-chlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]-2-fluorophenyl}-1-cyclohexyl-5-(2,5-dihydro-5-oxo-4H-1,2,4-
- oxadiazol-3-yl)benzimidazole hydrochloride,
 - 2-{4-[5-carboxy-2-(4-chlorophenyl)benzyloxy]-2-fluorophenyl}-5-cyano-1-cyclohexylbenzimidazole,
 - $2-\frac{4-[2-(4-\text{chlorophenyl})-5-(\text{dimethylcarbamoyl})\,\text{benzyloxy}]-2-fluorophenyl}{-5-cyano-1-cyclohexylbenzimidazole,}$
- 10 2-{4-[{N-(4-dimethylcarbamoyl)-N-(4-fluorophenyl)amino}methyl]phenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid,
 2-{5-[bis(3-fluorophenyl)methyl]-2-fluoro-4-hydroxyphenyl}-1cyclohexylbenzimidazole-5-carboxylic acid,
- 2-{3-[bis(3-fluorophenyl)methyl]-2-fluoro-4-hydroxyphenyl}-1cyclohexylbenzimidazole-5-carboxylic acid,
- 2-{4-[(3-dimethylcarbamoylphenyl) (4-fluorophenyl)methoxy]-2-fluorophenyl}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-{4-[{3-(4-hydroxypiperidyl-1-ylcarbonyl)phenyl}(4-
- 20 fluorophenyl)methoxy]-2-fluorophenyl\rangle-1-cyclohexylbenzimidazole-5carboxylic acid hydrochloride,
 - $1-\{[2-\{4-([4-(4-fluorophenyl)-2-methylthiazol-5-yl]nethoxy)phenyl\}-1-cyclohexylbenzimidazol-5-yl]carbonyl\}-\beta-D-glucuronic acid,$
- 25 $\{[2-\{4-[bis(3-fluorophenyl)methoxy]-2-fluorophenyl\}-1-cyclohexylbenzimidazol-5-yl]carbonyl\}-\beta-D-glucuronic acid, 2-<math>\{4-[2-(4-chlorophenyl)-5-(1,1-dioxoisothiazolidin-2-yl)benzyloxy]-2-fluorophenyl\}-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,$
- 30 3-{[4-(5-aminosulfonyl-1-cyclohexylbenzimidazol-2-yl)-3-fluorophenoxy]methyl}-4-(4-chlorophenyl)-N-isopropylbenzamide,
 2-[4-{2-(4-chlorophenyl)-6-(isopropylaminocarbonyl)benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-[4-{2-(4-chlorophenyl)-4-fluoro-5-(1,1-dioxoisothiazolidin-2-yl)benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,

```
2-[4-{2-(4-chlorophenyl)-5-(isopropylaminocarbonyl)benzyloxy}-2-fluorophenyl]-1-cyclohexyl-4-methoxybenzimidazole-5-carboxylic acid hydrochloride,
```

- 2-[4-{2-(4-chlorophenyl)-5-(N-isopropylcarbonyl-N-
- 5 methylamino)benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-[4-{2-(4-chlorophenyl)-5-(isopropylcarbonylamino)benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-[3-{[4-(4-fluorophenyl)-2-methylthiazol-5-yl]methyl}-4hydroxyphenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid,
 2-[4-{2-(4-chlorophenyl)-4-fluoro-5-(2-oxopyrrolidin-1yl)benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5carboxylic acid hydrochloride,
- 15 2-[4-{2-(4-chlorophenyl)-5-(methylsulfonylamino)benzyloxy}-2fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid
 hydrochloride,
 - 2-[4-{2-(4-chlorophenyl)-5-[N-methyl-N-(methylsulfonyl)amino]benzyloxy}-2-fluorophenyl]-1-
- 20 cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 2-[4-{[3-(4-chlorophenyl)-6-(2-oxopyrrolidin-1-yl)pyridin-2yl]methyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5carboxylic acid hydrochloride,
 - $2-[4-\{2-(4-chlorophenyl)-5-(acetylamino)benzyloxy\}-2-$
- 25 fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-[4-{2-(4-chlorophenyl)-5-(N-acetyl-N-ethylamino)benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-[4-{2-(4-chlorophenyl)-5-(N-acetyl-N-propylamino)benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-[4-{2-(4-chlorophenyl)-5-[N-ethyl-N-(methylsulfonyl)amino]-benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-[4-{2-(4-chlorophenyl)-5-[N-(methylsulfonyl)-N-propylamino]benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,

- 2-[4-{2-(4-chlorophenyl)-5-(N-acetyl-N-methylamino)benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-[4-{2-(4-chlorophenyl)-5-[N-(ethylsulfonyl)-N-methylamino]-
- 5 benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-[4-{2-(4-chlorophenyl)-5-[N-ethyl-N-(ethylsulfonyl)amino]-benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-[4-{2-(4-chlorophenyl)-5-[N-(ethylcarbonyl)-N-methylamino]-benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
- 2-[4-{2-(4-chlorophenyl)-5-[N-ethyl-N-(ethylcarbonyl)amino]benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - 2-[4-{2-(4-chlorophenyl)-5-methoxybenzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid,
- 2-[4-{2-(4-chlorophenyl)-5-(N-acetyl-N-isopropylamino)-benzyloxy}-2-fluorophenyl]-1-cyclohexylbenzimidazole-5-carboxylic acid hydrochloride,
 - $\{[2-\{4-[2-(4-chloropheny1)-5-(2-oxopyrrolidin-1-yl)benzyloxy]-2-fluorophenyl\}-1-cyclohexylbenzoimidazol-5-yl]carbonyl\}-\beta-D-glucuronic acid,$
- 2-{4-[2-(4-chlorophenyl)-5-(isopropylcarbamoyl)benzyloxy]phenyl}25 3-cyclohexyl-3H-imidazo[4,5-b]pyridine-6-carboxylic acid
 hydrochloride, and
 - 2-{4-[2-(4-chlorophenyl)-5-(pyrrolidin-1-ylcarbonyl)benzyloxy]-phenyl}-3-cyclohexyl-3H-imidazo[4,5-b]pyridine-6-carboxylic acid hydrochloride.

30

- 63. A pharmaceutical composition comprising a fused ring compound of any of claims 29 to 62, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.
- 35 64. A hepatitis C virus polymerase inhibitor comprising a fused ring compound of any of claims 1 to 28 and 29 to 62, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.

- 65. An anti-hepatitis C virus agent comprising a fused ring compound of any of claims 1 to 28 and 29 to 62, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.
- 66. A therapeutic agent for hepatitis C comprising a fused ring compound of any of claims 29 to 62, or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.
- 67. An anti-hepatitis C virus agent comprising (a) the antihepatitis C virus agent of claim 65 and (b) at least one agent selected from the group consisting of a different antiviral agent, 15 an antiinflammatory agent and an immunostimulant.
 - 68. An anti-hepatitis C virus agent comprising (a) the anti-hepatitis C virus agent of claim 65 and (b) interferon.
- 20 69. A therapeutic agent for hepatitis C comprising (a) the hepatitis C virus polymerase inhibitor of claim 64 and (b) at least one agent selected from the group consisting of a different antiviral agent, an antiinflammatory agent and an immunostimulant.
- 25 70. A therapeutic agent for hepatitis C comprising (a) the hepatitis C virus polymerase inhibitor of claim 64 and (b) interferon.

30

71. A benzimidazole compound of the following formula [III]

$$R^{a36}0 \xrightarrow{N} R^{a38} OH \qquad [III]$$

wherein R^{a36} is hydrogen atom or carboxyl-protecting group, R^{a37} is cyclopentyl or cyclohexyl, and R^{a38} is hydrogen atom or fluorine atom, or a salt thereof.

- 72. A thiazole compound selected from the group consisting of 4-(4-fluorophenyl)-5-hydroxymethyl-2-methylthiazole and 4-(4-fluorophenyl)-5-chloromethyl-2-methylthiazole, or a pharmaceutically acceptable salt thereof.
- 73. A biphenyl compound selected from the group consisting of 1-(4'-chloro-2-hydroxymethyl-biphenyl-4-yl)-2-pyrrolidinone and 1-(4'-chloro-2-chloromethyl-biphenyl-4-yl)-2-pyrrolidinone, or a pharmaceutically acceptable salt thereof.
- 74. A pharmaceutical composition comprising (a) a fused ring compound of the formula [I] of claim 1 or a pharmaceutically acceptable salt thereof and (b) at least one agent selected from the group consisting of an antiviral agent other than the compound of claim 1, an antiinflammatory agent and an immunostimulant.

10

- 75. A pharmaceutical composition comprising (a) a fused ring compound of the formula [I] of claim 1 or a pharmaceutically acceptable salt thereof and (b) interferon.
- 76. A method for treating hepatitis C, which comprises administering an effective amount of a fused ring compound of the formula [I] of claim 1 or a pharmaceutically acceptable salt thereof.
- 77. The method of claim 76, further comprising administering an effective amount of at least one agent selected from the group consisting of an antiviral agent other than the compound of claim 1, an antiinflammatory agent and an immunostimulant.
 - 78. The method of claim 76, further comprising administering an effective amount of interferon.
- 79. A method for inhibiting hepatitis C virus polymerase, which comprises administering an effective amount of a fused ring compound of the formula [I] of claim 1 or a pharmaceutically acceptable salt thereof.

- 80. The method of claim 79, further comprising administering an effective amount of at least one agent selected from the group consisting of an antiviral agent other than the compound of claim 5 1, an antiinflammatory agent and an immunostimulant.
 - 81. The method of claim 79, further comprising administering an effective amount of interferon.
- 10 82. Use of a fused ring compound of the formula [I] of claim 1 or a pharmaceutically acceptable salt thereof for the production of a pharmaceutical agent for treating hepatitis C.
- 83. Use of a fused ring compound of the formula [I] of claim 1 or a pharmaceutically acceptable salt thereof for the production of a hepatitis C virus polymerase inhibitor.
- 84. A pharmaceutical composition for the treatment of hepatitis C, which comprises a fused ring compound of the formula [I] of claim 1 or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.
- 85. A pharmaceutical composition for inhibiting hepatitis C virus polymerase, which comprises a fused ring compound of the formula [I] of claim 1 or a pharmaceutically acceptable salt thereof, and a pharmaceutically acceptable carrier.
- 86. A commercial package comprising a pharmaceutical composition of claim 84 and a written matter associated therewith, the written matter stating that the pharmaceutical composition can or should be used for treating hepatitis C.
- 87. A commercial package comprising a pharmaceutical composition of claim 85 and a written matter associated therewith, the written matter stating that the pharmaceutical composition can or should be used for inhibiting hepatitis C virus polymerase.

Fetherstonhaugh & Co. Ottawa. Canada Patent regents

